DEPARTMENT OF THE INTERIOR
BUREAU OF HEALTH

# History and Description

of the

# Philippine General Hospital

Manila Philippine Islands 1900 to 1911

Compiled by

JOHN E. SNODGRASS, M. D.

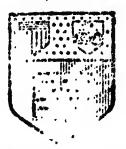
under the direction of the Acting Director of Health

DR. CARROLL FOX

October, 1911

MANILA BUREAU OF PRINTING 1912

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### FOREWORD.

In writing a history of the magnificent new hospital which now adorns Taft Avenue, Manila, it is proper to state, at the outset, that a lion's share of the credit for its erection is due the Honorable Dean C. Worcester, Secretary of the Interior, as it is extremely doubtful whether the hospital, in its present proportions and grandeur at least, could have been built without his unflagging interest and tenacity of purpose.

As a result of ten years of hard work and persistent effort on the part of Government officials and laity, Manila possesses a hospital which compares favorably with the best hospitals of the world and which is already proving a veritable godsend to the people of the Islands. Although it has been in operation only a short time it is apparent that more space will be required in the near future. Applicants for admission have to be turned away almost daily. The fact that the Filipinos are clamoring for more room clearly indicates that the right note has been struck, and that the hospital is going to prove of incalculable and lasting benefit to the Philippines.

Many other persons deserve special credit for their efforts toward the building of the hospital. More prominent among these are President Taft, Governor-General Forbes, Dr. J. R. McDill, former Commissioner of Health Major E. C. Carter, and the present Director of Health Dr. Victor G. Heiser.

Much difficulty has been experienced in collecting the necessary facts and data for this publication and the writer wishes to make acknowledgment of the material assistance rendered by the acting superintendent of the hospital, Mr. Newton C. Comfort, the chief accountant of the Bureau of Public Works, Mr. J. Pickering, the acting chief of building maintenance, Bureau of Public Works, Mr. Lewis Cook, and others who took part in the building of the hospital or are at present connected with the management of the institution.

John E. Snodgrass, Bureau of Health.

MANILA, P. I., October 1, 1911.

### HISTORY AND DESCRIPTION OF THE PHILIP-PINE GENERAL HOSPITAL.

#### HISTORICAL.

In the year 1900, prior to the establishment of the Civil Government in the Philippine Islands, and shortly after the arrival on the ground of the Second Philippine Commission, commonly known as the "Taft Commission," Dean C. Worcester, who was then a member of the Commission and who had held the position of Secretary of the Interior since the establishment of the Executive Departments of the Insular Government, formulated a plan for the establishment in Manila of Central Government laboratories for the performance of routine work and original scientific research, of a medical college, and of a General Hospital, all to be located as near each other as practicable, upon a lot large enough to provide for all probable future expansion, the three institutions to be so interrelated that the Government laboratories might do routine work for the hospital and at the same time carry on original research relative to the causation and relief of disease, utilizing for the latter purpose material furnished by the hospital; that the laboratory staff might be available for teaching in the medical school and for service in the hospital; that the students of the medical school might have abundant opportunity for practical instruction in the hospital wards and clinics; and that the members of the teaching staff of the medical college might have opportunity not only to aid in the hospital work but to carry on their own original investigations in the laboratory.

The realization of this project seemed so improbable that its originator was called "crazy," while the plan itself was commonly designated as "Worcester's dream." The first step toward its realization was taken when the Bureau of Government Laboratories was established on July 1, 1901, by the passage of an act which provided for the centralization of all the biological and chemical work of the Insular Government. A further and great advance was made when the Philippine Bureau of Science, into which the Bureau of Government Laboratories ultimately developed, occupied the carefully planned and well equipped laboratory building constructed for its special use. This building was erected on the so-called Exposition Grounds which afforded a

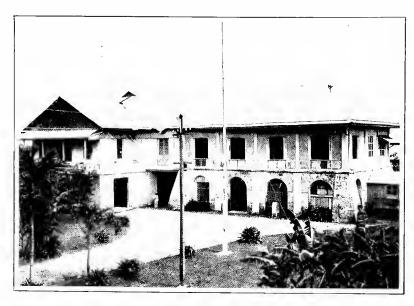
conveniently situated site of sufficient size to accommodate all of the buildings needful for a medical school and for a hospital of a thousand or more beds, but at the outset other plans were entertained relative to the future of that portion of the land in this tract not needed by the Bureau of Science, and it was only after a long and determined contest that its reservation for a hospital and a medical school was secured. Then followed the establishment of the medical school itself, which was provided for by a law enacted on December 1, 1905. The school was at first, of necessity, given temporary quarters pending the construction of a suitable home for it. The medical school building, which stands on the Exposition Grounds immediately to the west of the building of the Bureau of Science, was occupied on June 1, 1910.

The completion and occupation of the splendid group of reinforced concrete buildings which now constitute the Philippine General Hospital marked the full realization of "Worcester's dream."

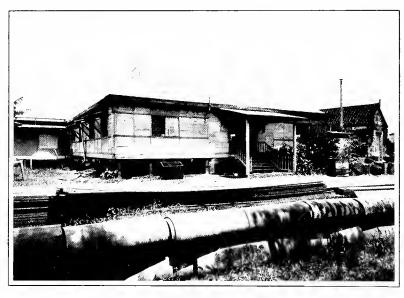
President Taft, the first American Civil Governor of the Philippine Islands, favored this project from the start. On November 30, 1907, immediately after a visit to the Philippines, he wrote Secretary Worcester as follows:

My own impression is that it would be much better if the Medical School were included in your Department of Sanitation. There, I think, is where it properly belongs, and as you have the laboratory and will have the hospital, it seems to me that the school should be under the same head. is not the slightest reason why it should be embraced in the Education Department. I regard the school as of the highest importance in the development of the Philippines and to furnish to the inhabitants a basis for more reasonable living and great physical development. I don't think that there is anything that we have on hand more important than to develop the Filipinos physically. I know it can be done if the improvements in the water supply, and in food, and in proper hygiene can be given proper application. The school, therefore, in spreading an evangel of decent, healthful living through its graduates is more of a sanitary than it is of an educational character. If I could visit the Philippines again in two years, I should hope to see your hospital and your medical school and your laboratory all running close together, and that ideal which you have painted in words so often in the Commission will then be realized.

Secretary Worcester has never sought to gain control of the College of Medicine and Surgery, which to-day forms an integral part of the Philippine University, but has successfully endeavored to bring about a practical working relationship between this college, the Bureau of Science, and the Philippine General Hospital, such that these three institutions might mutually assist each other and might constitute an ideal combination for the investigation and the combating of disease. Were President Taft to visit the Philippines to-day, he would see the Medical School,

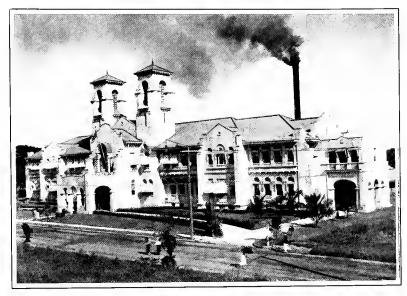


OLD CIVIL HOSPITAL.

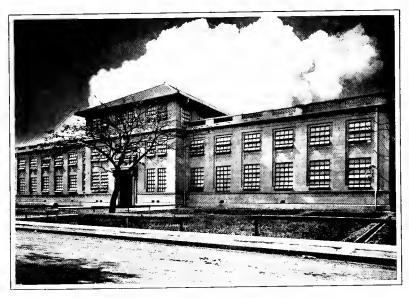


OLD LABORATORY BUILDING.

PLATE II.



BUREAU OF SCIENCE.



COLLEGE OF MEDICINE AND SURGERY,

PLATE III.

the Hospital, and the Laboratory running "close together," not only in *geographic situation* but in harmony and community of interest.

It is with the history of the General Hospital that the writer is chiefly concerned. President Taft's interest in this great hospital is by no means of recent date. While President of the Philippine Commission, and prior to his appointment as Civil Governor of the Philippines, he requested Maj. John R. McDill, U. S. V., to present recommendations looking toward the establishment of a General Hospital in Manila. The report of Major McDill made in reply to this request follows:

### FIRST RESERVE HOSPITAL, MANILA, P. I.

November 12th, 1900.

To the Honorable WM. H. TAFT,

President Civil Commission, Philippine Islands, Manila, P. I.

SIR: In compliance with your request I have the honor to make recommendations based upon the following brief statements concerning a general hospital for Manila, P. I.

The most useful hospitals are general ones, built upon the pavilion plan, with ample acreage and good management, under competent medical direction. It should combine a school of instruction for male and female nurses; the material should be accessible, under proper restrictions, to students of medicine and it should be a center for the scientific investigation of disease. In the present state of our knowledge of hospital construction, hygiene and the true principles of health such a hospital could be made a blessing and a benefit to rich and poor, as well as a safeguard and defense to the public health. The broad general object of hospitals may be stated to be the gratuitous medical and surgical treatment of indigent sick. There is a large class, however, above the very poor who are but ill able to afford skilled attendance and nursing at their homes. It is not desirable, nor is it always their own wish that these persons should be objects of charity and the establishment of paying departments meet this difficulty to some extent: However, if it is accomplished it should be done with fairness to other hospitals and to all concerned, and paying patients should have the medical man of their choice, and every physician should be, as far as his patient is concerned, in such a hospital a free, independent, responsible agent, enjoying equal rights with all as far as consistent with wise management. A cardinal principle to be observed in such a hospital is that it shall do as little harm as possible. There is always a certain danger of promoting in free hospitals negligence, shiftlessness, laziness, and vice by offering free relief from their consequences. This is a danger connected with the management and can be guarded against.

The only differences to be considered in constructing a hospital in Manila and one elsewhere are connected with the climate and classes of disease encountered. The construction is vastly simpler here than in temperate climes; the great subject of heating and artificial ventilation and their attendant expenses do not figure here at all. The provision in a general hospital for Manila against infectious diseases is primarily a defensive measure and demands immediate and most serious consideration. Means must be provided of isolating at once the earliest cases of epidemic disease.

Hours could be occupied in relating instances in which epidemics have evidently been prevented by the isolation of first cases of infectious disease. The necessity of these sanitary defenses is, therefore, exceedingly clear.

A hospital built in these days and under the direction of your commission which is so absolutely free from local political influences should have fewer objections to its plan than any Government hospital hitherto constructed; by avoidance of objects of expedience, of cheapness, or ornament and erected with the design of subserving all the interests of modern scientific achievements as well as the interests of patients and physicians.

The controlling idea in founding such institutions, unhampered by any misapplied notions of benevolence or necessity of economy should be the practical application of sanitary science in treating the sick; as it is well known that absurd and mistaken economy has often rendered pious labor and expense in a great measure not only useless but even fatal and destructive to its very aim and end.

#### SYSTEM OF BUILDING.

Of the two systems of building to choose from only the pavilion can be considered. This is the arrangement of a number of buildings, in which wards, administration, attendance, help, kitchens, and various parts of the economy are separated. This is in antithesis or contrast to the corridor system, a system of decentralization of the individual parts of a hospital.

#### ESTIMATE OF NUMBER NEEDING HOSPITAL CARE.

A question of primary importance to you is, how many beds are required. To the consideration of this subject can be brought experience concerning the general relation of the number of sick to the population of various places, as modified by the situation of the hospital and the climatic conditions; further, the principal occupations and general health conditions of a city's inhabitants, as well as the proximity of other institutions for the sick and many local factors. Not the least of these is that future management and arrangements of a hospital, to be founded now, can and should be such as to inspire confidence in the people as to its great necessity and benefit to health and thereby cause it to be used by all classes in time of sickness.

As far as this general experience is concerned, Plage estimated upon the basis of Husson's investigations that, according to the number of sick received in the Parisian hospitals and the number of days spent by the sick in hospital, for each one thousand inhabitants about five beds were used. Essentially less is the calculation by Douglas C. Galton on the general hospitals of London, exclusive, of course, of hospitals for infectious disease, which is about one bed to one thousand inhabitants. This last proportion, for general and surgical cases, Galton, in conformity with the view of Burdett, Waring, and others, says can be regarded as the standard sick bed necessity of English municipalities. In addition, Burdett insists that for districts with mines, great shops and the like, four to five beds for each one thousand people should be provided. Oppert finds that for large cities with extensive poor districts about four beds per thousand are needed. According to a computation on the basis of the statements of the statistical "Jahrbuch" of German cities, Hamburg in 1890 used for each one thousand inhabitants about five beds, this included all of the general hospitals for every purpose. Berlin used about four beds. Cologne five and seven-tenths, Stuttgart six beds, Potsdam six and eight-tenths beds, Breslau four beds, and Dresden three and three-tenths beds. Therefore, for large cities space for hospital accommodations of at least five beds to each one thousand inhabitants should be provided, especially as hospitals are in these times far better understood and appreciated and far more taken advantage of than formerly.

Thus far it is assumed that these estimates were entirely based on the use made of hospitals by the poorer classes. Should paying patients be admitted the beds for such are to be provided in addition.

In deciding the extent of area of a new hospital it is necessary to consider not only the present need, but there must be a certain reserve space, which future increase in population will require, as well so as to be prepared for special emergencies, like epidemics and great disasters from storms, floods, or fire.

#### SIZE OF A HOSPITAL.

Although many authorities have laid it down that no hospital should house more than five hundred patients, the great example of the "Hamburg-Eppendorf" pavilion hospital of fifteen hundred beds, where every detail of administration, service, and of attention to hygiene is carried out to perfection, shows the possibilities of modern methods and science in hospital construction, organization, and management.

SIZE, LOCATION AND NATURE OF A HOSPITAL SITE OR GROUND AREA.

Primary requisites; pure and fresh air; sufficient elevation for drainage; pure soil; accessibility by water and wheel transportation, and for pavilion hospitals about 100 square meters (120 square yards) per bed for a hospital of one hundred beds.

This surface area should increase with the number of beds until a 600-bed hospital would have about 150 square meters per bed, or namely fifty beds to the acre. One acre equals about 4,050 square meters.

Infection hospitals need a greater area or thirty to forty beds to the acre.

The average ground area of the following-named hospitals of a total of 6,370 beds is 132 square meters.

To boas to zon square account	Beds.	meters.	
Hamburg-Eppendorf	1,500	124	
Friedrichshian	784	122	
Heidelberg	360	110	
Ruldolfspital, Wien	800	43	
Lariboisiere, Paris	612	82	
St. Louis, Paris	700	130	
Montpellier	600	150	
Zurich	500	160	
Kopenhagen	312	280	
Johns Hopkins	400	140	

The Kinderspital of Moskau of 180 beds has an average ground area of 782 square meters per bed.

When sites of general hospitals are too distant from the center of population for the transport of emergency or cases needing immediate care, a most desirable and necessary adjunct is a centrally located emergency hospital.

#### BUILDING PROGRAM.

As before stated, there should be discussed here only a general pavilion hospital with a department, either on the general same site or remote, for infectious diseases.

Incurables, the insane, lepers, and pulmonary tuberculosis should be cared for in separate institutions, in special localities.

By a general hospital is meant one with departments for all medical, surgical, and lying-in, eye and ear, and children's diseases.

- 1. A building should be set aside for the nurses on duty and under training.
- 2. A building for clinical instruction of students of medicine is one of the obligations of every modern public hospital.
- 3. In the disposition of the space the sick must be grouped by separation of the sexes and then further according to the nature of the diseases.
- 4. When paying patients are to be admitted their buildings should lie together.
- 5. A two-story or corridor building might be found desirable for the segregation of syphilis, venereal and contagious skin diseases which are usually separated from the main body of a hospital more on disciplinary than medical grounds.

Each general hospital, aside from the contagious department, divides into two principal sections—surgical and medical.

This allows of the most convenient grounding of buildings and of the arrangement for the best care of the sick and the best work of the medical staff.

Accordingly the following chief grouping of the sick and their separation in the building program must be kept in view:

- 1. Surgical Department including eye and ear, gynecology, and so forth.
  - 2. Medical Department.
  - 3. Obstetrical Department.
- 4. Department for acute infectious disease as scarlet fever, measles, mumps, typhus, cholera, smallpox, plague, pyaemia, 'erysipelas, diphtheria, and hospital gangrene.

It is very difficult to determine even approximately the number of beds required for each group of diseases which fluctuates so markedly. Plage has, however, arranged a procentum scale for a 300-bed hospital which as applied to Germany and the continent is instructive.

Each large general hospital should have a detention house for acute manias, violent delirium tremens, objects of disgust, as sexual perverts and sick prisoners.

The capacity of ward buildings should range from four to sixty beds each. Each ward should have one or more separate or private rooms, a day room, bath, closets, etc.

Every detail of construction, furnishing and arrangement of buildings one to the other can be now planned before hand so that plans and specifications can be drawn upon which a contract can be let that will not need any important alteration or change.

#### THE ISOLATION HOSPITAL OR DEPARTMENT.

Of supreme importance is the pathological laboratory and experiment station for the scientific investigation of contagious and epidemic disease, as the chief feature of the isolation hospital. The necessity of isolation hospitals for contagious disease and which are primarily defensive, is too absolute to require argument. With a favorable and accessible site of sufficient area, the question of cost of barrack and tent hospitals for great emergencies can be briefly dismissed as being about one-fourth that of a permanent hospital. The pathological institute, however, and its wards to accommodate about 100 beds should be permanent structures. Such an

arrangement of an isolation hospital combined with a perfectly equipped bacteriological and pathological laboratory and observation wards would be one of the most important in the world and could benefit mankind as has the celebrated Koch Institute of Berlin, established by the German Government and the Kitasato Laboratory of the University of Japan.

In a coast city like Manila, exposed to epidemic disease, there should be preparation always to furnish without much delay floating river or harbor hospitals in addition to the above accommodations.

#### COST OF SUBSISTENCE AND RUNNING EXPENSES.

Subsistence of native patients and native employees it is thought would not cost above 20 cents gold per day. The pay of attendants and employees, who should be mostly natives, is about one-half that in America or European countries or even that of the enlisted men of the Hospital Corps in the United States Army.

Competent medical and administrative officers will cost as much or more than paid by the army or civil institutions at home.

Once a medical college is established by the Government the graduates can be used as assistants and they are glad to serve one year for the experience. Such positions are obtained by competitive examinations and are highly prized.

It will be interesting to know the expense of a military hospital in Manila. Military Hospital No. 1, now a 400-bed hospital, costs the War Department about as follows for one year:

U.	S. currenc
Salaries of seven medical officers who are also officers	\$15,000
Pay of one hundred enlisted men of the Hospital	
Corps	26,500
Pay of twenty-six women nurses	16,000
Pay of forty-five civilian employees	10,000
Cost of rations for above	10,000
Cost of medicines and surgical dressings	6,000
If 400 beds are filled at 35 cents per day for sub-	
sistem :	51,500
Total	135,000

Average cost per patient per day 82½ cents. Later estimates make cost \$1.50 U.S. currency.

A civil hospital of the same capacity with native labor and other attendants, officered by American medical men and with about seven first class trained women nurses and a matron would cost approximately as follows, for one year:

·	
U.	S. currency.
Four medical and administrative officers	\$10,000
One hundred nurses, attendants, etc	15,000
Seven trained women nurses and one matron	4,000
Forty laborers, teamsters, etc	3,000
Subsistence of above	6,000
Medicines, etc	5,000
Four hundred beds at 20 cents per day	29,000
Total -	72,000

Average cost per day per patient, about 50 cents gold for native patients.

#### COST OF BUILDING AND FURNISHINGS.

Construction costs naturally vary greatly in different countries and are governed by prices of material, labor, and style of building for different climates. Aside from the cost of the grounds, their ornamentation and the roads leading to and around them, simplicity or richness of the buildings, the size and style of construction, cause an important difference in the cost per bed. In addition to the estimate submitted herewith of cost of construction in Manila, showing cost per bed to be from \$400 to \$500 United States currency, the following list is instructive as showing the cost per bed of various large hospitals:

Lariboisiere, Paris, 612 beds, per bed, \$3,250, including cost of grounds, buildings and furnishings.

The following costs per bed are exclusive of ground and furnishings:

Hotel Dieu, Paris, 566 beds (corridor)	\$3,000
St. Thomas, London, 588 beds (corridor)	3,250
Without the heavy and extensive foundations neces-	
sary	1,250
Antwerp Civil Hospital, 380 beds (semi-corridor)	1,800
John Hopkins, Baltimore, 400 beds (pavilion)	4,000
Friedrichshain, Berlin, 620 beds (pavilion)	1,680
Am Urban, Berlin, 600 beds (pavilion)	1,075
Hamburg-Oppendorf, 1,500 beds (pavilion)	875
Dresden Children's Hospital, 114 beds (pavilion)	1,050
Kronprinz Rudolf, Wien, 800 beds, combination corridor	
and pavilion	1,600
Offenbach Hospital, 250 beds (pavilion)	850

The more the decentralization of the parts of a hospital are carried out, the higher the cost. Combination corridor and pavilion hospitals of modern build require in other countries about \$750 per bed and the larger hospitals on the pavilion plan about \$1,000 per bed, and this by avoidance of unnecessary luxury in detail.

It is also obvious that the more the sick are divided in separate buildings, the greater the cost per bed. For instance: the two-story pavilions at Hamburg of seventy-two beds, per bed \$375. The one-story pavilions at Hamburg of thirty-three beds, per bed, \$450. The one-story pavilions at Hamburg of fifteen beds, per bed \$600.

#### NECESSARY FURNISHINGS.

In an entirely new institution, the general necessary furniture and fixtures without instruments will require an outlay of from \$100 to \$150 per bed. The latter sum is scarcely ever exceeded in the most richly equipped hospitals. The average interior furnishing cost, including the instruments, is much the same everywhere and can be estimated for Manila from the following modernly outfitted hospitals:

Hamburg-Eppendorf, per bed	\$185
Friedrichshain, per bed	4100
Am Ilahan nan had	140
Am Urban, per bed	170
Rudolfspital Wien, per bed	125

Considering the cost of transportation, breakage, etc., \$200 per bed should be allowed for a Manila hospital.

#### RECOMMENDATIONS.

- 1. That acreage as central and accessible as possible be secured for a 1,500-bed pavilion general hospital. This would require about forty acres. Also acreage for 100-bed infectious disease hospital of permanent construction with space about it for 300 patients in tents or barracks in event of a great epidemic; this would require about fifty acres of ground. This area would meet all future needs of Manila for many years as far as hospital sites are concerned.
- 2. That upon the basis of the population, etc., funds be provided for constructing a 1,000 or 1,500 bed general pavilion hospital at the rate of 300 beds per year, and that the permanent buildings of the infectious disease hospital and its laboratory and experimental station be completed as soon as possible.
- 3. That, pending your action on a permanent hospital, arrangements be made with the San Juan de Dios Hospital for 150 beds to be used for the present emergency needs of the city; or, if this is found to be impracticable, that a suitable large building, preferably in the Walled City, be rented and equipped as the Manila emergency hospital, and that the work of training native Filipina girls as nurses be started in connection with it at once.

Very respectfully,

(Sgd.) JOHN R. McDILL,
Major and Surgeon, U. S. V.,
Operating Surgeon, 1st Reserve Hospital.

Toward the end of the year 1900 the Philippine Civil Commission began to take an active interest in the agitation for the hospital, and on January 23, 1901, passed the following resolution which was transmitted to Major General McArthur, at that time Military Governor of the Islands:

Resolved that the Commission wishes, if practicable, to establish a general municipal hospital in this city, with a capacity of three hundred beds or more, for the use of the civil servants of the Insular Government and the white and native population of Manila and the Islands. With a view to the execution of this purpose the president is directed to communicate with the Military Governor, and learn from him whether the building now used as a second reserve hospital can be turned over to the civil authorities of Manila to be used as a general civil hospital, and whether the equipment of the second reserve hospital could be transferred to the Insular Government upon the payment of a reasonable sum therefor to be fixed by a board of competent officers and physicians; and to inquire further upon what terms the building now occupied as the second reserve hospital, and the land upon which it stands, is held by the Government, and whether the terms of the lease, if any, would permit a transfer from the United States to the Insular Government.

Immediately after the arrival of the American army in the Islands military hospitals were established in Manila. The military medical corps extended the courtesies of the army hospitals to civilians when it was possible to do so but, of necessity, this service was highly unsatisfactory to the citizens of Manila.

In spite of the efforts made to establish a hospital for the ac-

commodation of civilians, this state of affairs continued until the month of March, 1901, when the situation was somewhat relieved by the establishment of the Women's Hospital at 350 Gral. Solano. This institution was intended, primarily, for the accommodation of women and children only, but in urgent cases men were admitted also.

A short time after this an agreement was reached between the hospital authorities and the Government officials, whereby Civil Government employees were to be given medical and surgical attendance in this institution, but, unfortunately, it was soon discovered that the facilities here were inadequate to meet the demands of the situation; moreover, the American population was rapidly increasing, which made it imperative that other accommodations be provided.

The first step toward relieving the situation was taken on August 6, 1901, when the Philippine Commission, by the passage of Act No. 189, made it incumbent upon the Civil Government to render medical assistance to its employees and their families. This provision was followed, on October 1, 1901, by the passage of Act No. 247, which established the Philippine Civil Hospital. The need for the hospital was so great that the necessary equipment was quickly procured and the institution opened within the month, in a part of the buildings on Calle Iris in which it was located at the time it was abolished on the opening of the General Hospital in 1910.

In the meantime the Women's Hospital had been merged with the Cosmopolitan Hospital for which subscriptions had been raised and a building erected. Elaborate plans were made for expansion but at the critical period enthusiasm waned, and, partly due to the fact that patients were now being treated very cheaply at the Civil Hospital, the project was abandoned in December 1902. This building is the present City Hall.

The Civil Hospital rate for Government employees was placed at \$\mathbb{P}\$2 per day for wards and \$\mathbb{P}\$5 for private rooms, (one peso, \$\mathbb{P}\$, is equal to 50 cents U. S. currency) and accommodations were furnished at \$\mathbb{P}\$3 per day for wards and \$\mathbb{P}\$6 for private rooms to those not in the employ of the Government. It cost the Government an average of about \$\mathbb{P}\$8.50 per person per day for all patients for subsistence, quarters, and attendance.

It was realized that the hospital was badly located and poorly suited to its needs in many ways, but at this time it was practically impossible to obtain satisfactory buildings. Then again it was only intended as a temporary location, as the original intention to build a large general hospital had by no means been abandoned.

That the citizens of Manila had not given up the idea and that the question was to them a very live one was evinced by a petition to the Governor and Commission in the early part of 1903.

This petition was signed by people from all walks of life in Manila. The major part of the petition is reproduced below:

PETITION WITH PREAMBLE TO HIS EXCELLENCY THE GOVERNOR OF THE PHILIP-PINE ISLANDS AND THE HONORABLE MEMBERS OF THE CIVIL COMMISSION ASKING FOR THE IMMEDIATE ESTABLISHMENT IN THE CITY OF MANILA OF A GENERAL HOSPITAL. 1903

The need of a general hospital in the city of Manila, where citizens and ratepayers may receive medical and surgical treatment without discrimination or preference is a pressing one. Of the existing hospitals, San Juan de Dios, though it has 150 free beds, for which the Insular Government makes some provision, is a private institution; furthermore, it is poorly situated, and, however great its desire might be, it could not begin to cope with the needs of the case: the Civil Hospital, though it has received others than those in the civil employ in the past, was established for the express purpose of providing for the needs of Civil servants, and it has neither the accommodation nor the opportunity for a work such as in the judgment of your petitioners the situation demands; again, the army hospitals are for soldiers only and are not open to the general public; and lastly, the voluntary enterprise known hitherto as the Women's and now as the Cosmopolitan Hospital is a financial failure. As an illustration, however, of the need of a general hospital, appended to this petition is a brief statisticial report of said Women's or Cosmopolitan Hospital.

It is obvious, both from our experience in Manila as well as from the history of such institutions in the United States, that any further attempt to establish a voluntary hospital would be ill-advised. Unless at the outset liberal endowments were forthcoming, such an endowment as we could not hope to secure, the most earnest effort would be destined to speedy failure. The shifting population of the Philippine Islands, and the serious, if not insurmountable difficulty of arousing and sustaining interest among our fellow-citizens at home in a voluntary hospital in Manila, make the raising of even a modest sum of money a practical impossibility. This uncomfortable but undeniable fact necessitates the reluctant abandonment on the part of those who have been active, in the matter, of their plans for the reconstruction of the Woman's as the Cosmopolitan Hospital. Something wholly inadequate might be established and made to drag out a weary existence on a voluntary basis, but what is needed is not merely a hospital where a public dispensary and a staff of competent physicians, surgeons, and nurses would minister to outpatients, where the best equipment and skill would provide for the needs of inpatients, and where sooner or later a training school for nurses would give Filipinos and others an opportunity to secure training as is found in home hospitals.

We would base our petition, however, not merely on the fact that a voluntary effort has been tried and found wanting, but also and chiefly on our rights as citizens and ratepayers. It is recognized, and justly so, by the Insular Government that Civil servants should have ample provision made for them in case of sickness. But is it not so that we, who are sharing in no inconsiderable degree in the expense of the Government, should have a place provided for us when, in this country of sudden, serious, and obscure diseases, we chance to fall ill, especially as the majority of our American

citizens and of English and other ratepayers would be only too thankful to pay any reasonable rate for treatment if they had a hospital to which they were eligible? In the cities of the home land citizens demand this as a right to which they are entitled by virtue of their citizenship. It may be added here that while a voluntary hospital might struggle in vain for funds, an institution founded as we propose would be the recipient of gifts for endowment through bequests and otherwise, if the experience of general and city hospitals in America affords any sort of guide to what we might expect.

But once more. Behind our selfish needs, which after all are relatively small as compared with those of whom we would speak, rises the great army of the suffering and uncared for poor who, at the present moment, think of a hospital with horror as a dishonor, just as the same class used to do in the cities of America. It is for these we plead. However valuable the work of the Board of Health physicians may be, without a general hospital and a public dispensary, it is greatly handicapped. The work of mercy that could be done for this vast population of sufferers by a hospital equipped and manned as well as the science of to-day knows how, would seem to be as immediate and as imperative a duty as any political service that could be rendered.

Your petitioners wish to make it clear that in such a project as they have in mind, they are proposing nothing novel or revolutionary; they are but following a course that has long since been approved in every enlightened community. In all considerable cities in America the municipal government has recognized it to be a duty to establish and subsidize a general or city hospital with public and private wards. While voluntary gifts are expected and may aid in the foundation and maintenance of such an institution, it is broadly conceded that a hospital is a necessity not a luxury, both as a safeguard for, and as a right of, the community; and that the public funds, that is to say the money of the people contributed to the municipal treasury through taxation, should make the main provision for its creation and support. Furthermore, such institutions for the people are placed by the authorities in the hands of the people for administration through the agency of a board of trustees, consisting of representative citizens duly appointed. All this is a commonplace in American cities and there is no need of enlarging upon it. Sooner or later a general hospital will be established in this city as a matter of course, and all this petition aims at is to hasten the day, on the grounds of the urgency of the need and the economy of valuable lives in immediate action.

In order that the matter may come before your honorable body in as concrete shape as possible, your petitioners, in addition to stating the broad outlines of their desires, have appended by way of suggestion, the Acts and Ordinances relative to the establishment of the Boston City Hospital.

In view of the foregoing and other considerations, your petitioners respectfully ask the acting Municipal Government of the city of Manila, that is to say the Insular Government:

- 1. That a General Hospital be established in the city of Manila at the earliest moment practicable.
- 2. That the existing Civil Hospital be merged into the said General Hospital, with such provision for the separate care of Civil employees as may be deemed expedient. This is suggested as a matter of economy and as indicating how it would be possible to achieve the end in view without an unwarranted increase of expenditure, in event of no preferable plan being found feasible.

- 3. That the Women's, or Cosmopolitan, Hospital sink its individuality in the said General Hospital. The present incomplete building of the aforesaid Cosmopolitan Hospital might be taken over and equipped for the General Hospital on such terms as were mutually agreed upon by the Insular Government and the Directors of the Cosmopolitan Hospital, provided that the said buildings were pronounced, after examination by experts, to be suitable for the purpose. (See appended Report.)
- 4. That temporary provision be made for general hospital work until such time as permanent quarters are completed.
- 5. That the said General Hospital be free to all without prejudice on account of race, color, or religion.
- 6. That, while the main purpose of the hospital be to minister to the poor, ample provision be made for private patients, who will contribute special fees determined by the Board of Trustees and used as they may direct.
- 7. That there be: (a) An out patient department with a public dispensary. (b) A training school for nurses.
- 8. That, mutatis mutandis, the Acts and Ordinances of the Boston City Hospital be the basis of the foundation to be known as the General Hospital in the city of Manila \* \* \*.

The following extract from the Secretary of the Interior's address upon the occasion of the laying of the cornerstone of the hospital, February 28, 1908, gives a portion of the subsequent history very accurately. The first paragraph refers to the petition given above:

The Commission was impressed with the reasonableness of most of these requests and with soundness of the arguments brought forward in their support. On June 1, 1903, it appointed a temporary committee, consisting of Governor Taft and Commissioners Worcester, Wright, and Smith, to confer with the Right Reverend Charles H. Brent, the chairman of the citizens' committee, upon the question of a general hospital at Manila. This conference having been held, the committee of the Commission recommended to that body the appointment of another committee, consisting of the Secretary of the Interior, the Secretary of Public Instruction, the General Superintendent of Education, and the Superintendent of Government Laboratories, to have general charge of negotiations relative to the proposed hospital and to meet in joint session with the citizens' committee as occasion might require. It was instructed to investigate and report as to whether it would be wiser to utilize the Exposition Grounds, where the building of the Bureau of Government Laboratories had already been erected, as a site for a hospital and a medical school, reserving the land which Commissioner Legarda had offered to donate as a site for secondary schools, a normal school, and all departments of the future university except the medical school and possibly the law school; or to accept Commissioner Legarda's proposition to use the property offered by him for the hospital and to continue the use of the Exposition Grounds for educational purposes. committee was further directed to report on the practicability of erecting a temporary hospital and also on the possibility of securing from the Army the Third Reserve Hospital until new buildings could be constructed.

A word of explanation as to the question thus raised relative to the hospital site. The Bureau of Government Laboratories had long since outgrown its temporary quarters back of the Civil Hospital. As its work

had increased the necessity for the construction of a modern laboratory building had become manifest, and when a site for this building was sought Commissioner Legarda had generously offered to donate a large lot, beautifully situated on an extension of the Santa Mesa ridge, but for more than a year unexpected legal complications had prevented his conveying this land to the Government. Meanwhile the necessity for the erection of the new laboratory building had become so urgent that the Secretary of the Interior, after considering all other available locations, had requested the Commission to set aside a site for it on the Exposition Grounds, at the same time calling attention to the fact that the erection of a laboratory building there would logically involve the construction of hospital and medical school buildings on the same tract of land.

The Exposition Grounds had originally been provisionally set aside for educational purposes, but, with the approval of Professor Bernard Moses, the Secretary of Public Instruction, the policy of placing the new laboratory building there was agreed to, as were the logical consequences of this policy. Meanwhile some of the buildings already on the ground had been occupied by teachers, and at a later time the establishment of the Normal School in others had been approved by the Secretary of the Interior, with the distinct understanding that such occupation of these buildings was to be temporary and to continue only until they were required for hospital purposes.

Several meetings of the joint committee were held, and in the end it was agreed to recommend to the Commission the utilization of the Exposition Grounds as a site for the General Hospital and the immediate establishment of a temporary hospital in the buildings then occupied by the Normal School and by teachers, it having been first ascertained that the Third Reserve Hospital building could not be secured from the military authorities. The Commission adopted the recommendation of the joint committee relative to site; but as there were no suitable quarters to which the Normal School could be immediately transferred, and as its work was too important to be even temporarily interrupted, decided not to attempt the establishment of a temporary hospital on the Exposition Grounds, but pending the erection of new buildings, to utilize to the fullest possible extent, and to increase if necessary and practicable; the facilities of the Civil Hospital.

The Chief of the Bureau of Construction and Public Works was instructed to proceed immediately with the preparation of plans for a pavilion hospital of 300 beds. The joint committee continued its labors, appointing technical subcommittees on law and on hospital plans. Ultimately it recommended to the Commission for adoption the draft of an act for the establishment of the Philippine General Hospital. The preliminary hospital plans prepared by Architect Bourne were returned to him after being made the subject of painstaking criticism, and on March 25, 1904, final plans, acceptable in form to the joint committee, were adopted. Shortly afterward they were forwarded to the Commission, with the recommendation that construction work be inaugurated at an early date.

And now this long-cherished and long-delayed project met with a serious reverse which, for the time being, threatened to be fatal. The Insular Government had fallen upon evil days. In its eagerness for progress it had expended very large sums for the establishment of a system of public instruction, the construction of public works, the maintenance of public order, the preservation of public health, and for other important public purposes. Its revenues had fallen far short of expectations and were steadily decreasing.

The bare bottom of the Insular Treasury was looming ominously before the eyes of the legislative body, and unfortunately the carefully prepared plans submitted by Architect Bourne, and approved by the joint committee, called for the expenditure of a sum greatly in excess of that which could safely be made available.

An additional complication now arose as the result of suggestions from the Commanding General relative to the transfer to the Civil Government of a number of buildings occupied by the Army, including its First Reserve Hospital. The Secretary of the Interior and the Director of Health were reluctantly forced to admit that, although the First Reserve Hospital site was by no means an ideal one and its buildings left much to be desired, still in view of the condition of the Insular Treasury, if they could be obtained it was the part of wisdom to accept and to utilize them. Negotiations for securing them were inaugurated and pushed forward as rapidly as possible, but they dragged on for a long period and finally, during the visit to the Philipines of the Secretary of War and the Congressional delegation, the conclusion was reached that they could not be transferred. Meanwhile the joint hospital committee after some fruitless attempts to secure aid in the United States, had lapsed into a permanent state of suspended animation.

But help had come from an unexpected quarter. On April 1, 1905, a committee had been appointed by the Governor-General for the purpose of inquiring into and thoroughly analyzing the organization of Bureaus and Offices of the Insular Government with a view to determining the usefulness of each Bureau or Office, the possibilities of improvement therein by eliminating the duplication of labor, and the further purpose of considering the equalization of salaries, the methods employed in bookkeeping, and generally to suggest any changes in office management that would tend to simplify methods of labor and be productive of economy and increased efficiency. This committee was quick to see that in operating a hospital in a scattered group of unsuitable rented buildings, located on an insanitary site, the Insular Government was pursuing a poor business policy and that the money usually paid out in rental represented the interest on a large sum which might well be invested in suitable buildings, thus making possible a more economical and efficient administration. The committee in its report strongly recommended that such buildings be constructed. Meanwhile the condition of the Insular finances had steadily and quite rapidly improved, and an authorization by the Congress of the United States for the issue of bonds to the extent of \$5,000,000 to secure funds for the construction of public improvements had further relieved the situation. Secretary of the Interior filed a vigorous claim against the first bond issue for a sum sufficient to erect suitable general hospital buildings and, aided by the Director of Health, undertook to secure the preparation of new plans, the carrying out of which would result in furnishing the needed facilities without imposing on the Insular Treasury so heavy a burden as would have been involved in erecting the building planned by Architect Bourne. course was resorted to reluctantly, for the reason that it entailed further delay, but no other seemed possible.

On April 15, 1905, Dr. Victor G. Heiser assumed the duties of Commissioner of Public Health which office had been left vacant by the resignation of Major E. C. Carter. Dr. Heiser, first as Commissioner of Health and after November 1, 1905, as Director

of Health, gave material and active assistance in helping perfect plans and later, when the project became a reality, in noting and correcting defects in the work. After the report of the reorganization committee had been received he, on October 4, 1906, sent an urgent communication to the Secretary of the Interior in which he makes a very concise statement of the necessity for the hospital in the following language:

Within a short time the Civil Hospital problem will necessarily come before the Commission for solution, therefore, I take this occasion to call your attention to certain facts and recommendations pertinent thereto, for the purpose of setting forth the requirements of the situation.

The reorganization committee, after an exhaustive examination into the conditions under which the institution is now conducted, reported that:

"The present Philippine Civil Hospital buildings and site are so expensive and unsatisfactory, that your committee respectfully urges the immediate construction of the nucleus of a general hospital as a measure of economy as well as an essential to efficiency. The present rental charge is \$12,000 per annum, which, at the rate of the last bond issue, would be the interest on approximately \$400,000.00. The number of employees now required, by reason of the poor arrangement of wards, would be able to care for a larger number of patients in a properly arranged establishment. The land immediately adjoining the grounds of the present hospital is so low and in such an insanitary condition, that, according to a recent survey, about \$\phi 50,000\$ would be required to make the location even tolerable. It is reported that inmates of the hospital have contracted diseases traceable to the conditions just described."

The report, while brief, is so comprehensive and accurate that little remains to be said except to set forth a few reasons why a modern hospital is so urgently needed, and this I shall do in numerical sequence for the sake of brevity, without regard to orderly arrangement as determined by their relative importance:

- 1. The contract which the Government enters into with its employees provides that they shall be entitled to medical care and treatment. It is impossible properly to meet this obligation under the present conditions.
- 2. In order that the medical officers charged with the responsibility of caring for the health of the officers and employees of the Civil Government may do themselves justice and render that degree of service rightfully expected by the patients themselves, better facilities are required.
- 3. In view of the fact that the Commission has to some extent committed itself to the policy recommended by not making appropriations for the repairs that will have to be made on the present buildings, if they continue to be occupied for hospital purposes, prompt action will be necessary.
- 4. One of the most difficult features, especially in the Philippines, in the successful administration of a hospital, is the question of keeping an adequate force of competent nurses. It is proposed to remedy this condition by training native women as nurses, and through them, not only overcome the difficulty as presented throughout all parts of the Philippines, but also to eliminate the *cirujano ministrante* with his uncertain status, and the *mediquillo* with his total ignorance of the science of medicine.
- 5. The death rate of the city of Manila is still abnormally high, and improvements are hardly to be looked for until there are proper facilities for studying in hospitals the diseases which are responsible for the high

rate of mortality. During the month of July there were 743 more deaths in Manila than during the corresponding period of last year. A large percentage of these deaths were ascribed to such indefinite causes as bronchitis, meningitis, and similar diagnoses, which fact shows the imperative need of better facilities for the application of scientific knowledge and exact methods of diagnosis in the treatment of disease.

6. The time has come when modern facilities are needed by the hospitals of the city for the teaching of clinical medicine to physicians and medical students in order that a new era of practice based on accurate diagnosis may supplant the present system of haphazard drug prescribing.

7. Through such a hospital as is contemplated, ample facilities without additional cost would be available for imparting instruction to midwives and medical students in the science and art of obstetrics, and through this knowledge, to redeem from the present fatal ignorance and superstition, and save many a life which under the present practice would be sacrificed and accounted for as a consequence of the prevailing excessive infant mortality.

8. A modern hospital would be a powerful factor in disseminating sanitary and hygienic knowledge among people. To similar agencies Japan is indebted for her wonderful health service.

9. The location and structural defects of the buildings now occupied as a Civil Hospital, preclude the practicability of remodeling them for a new hospital, even if the land were the property of the Government, hence the advisability of selecting a location which will meet all the requirements, for instance, such as the grounds near the Bureau of Science, an institution on which much of the scientific work of the hospital will largely depend. Inasmuch as this site is satisfactory with reference to its location and environments, it is recommended that it be immediately approved and set apart for hospital purposes.

10. The present Civil Hospital does not offer that privacy for maternity cases to which they are justly entitled.

The plans and estimates of the Consulting Architect to the Commission, are forwarded herewith. While the undersigned is not prepared to indorse every detail in the plans, yet, on the whole, it is believed they are satisfactory and that such changes as are recommended will not increase the estimate beyond half a million pesos.

With a new modern building and increased facilities for taking care of native patients, the work of the hospital could be made a mighty factor in demonstrating the sincerity and helpful purposes of the American Government. Foreign mission boards of all denominations rely on their hospital and medical services to gain the confidence of the people whom they desire to influence. One satisfied, grateful patient is worth more than a thousand nominal adherents, as he remains a friend for all time to come.

Commissioner Worcester forcibly expressed his views on the subject, in a letter to the Governor-General on October 21, 1906, in the following language which is a partial reproduction of the communication:

Finally, I desire urgently to recommend to the Commission the early construction upon the Exposition Grounds of a sufficient number of buildings of a pavilion hospital to furnish approximately 200 beds, this hospital to be constructed in accordance with the plans prepared by the Consulting

Architect which allow of systematic future development through the addition of other ward buildings which have been planned for at this time and for which adequate ground space should be reserved in accordance with the plan now presented.

The question of the establishment by the Insular Government of a general hospital at Manila is a rather sore subject with me. inadequacy of the buildings at present used, the insanitary nature of the site on which they stand, and the very excessive cost to the Insular Government of maintaining this hospital as it is at present conducted, are hard facts which have been repeatedly brought to the attention of the Commission and have also been frequently made the subject of by no means unjustified attacks in the public press. The recommendations of the Reorganization Committee on this subject are brief and to the point and their soundness can not, I think, be gainsaid. I long since brought to the attention of the Commission the urgent necessity for beginning the work of the construction of a general hospital on a site which would allow of adequate future development, and served formal notice that as soon as I could secure accurate statements as to what was necessary at the outset and what it would cost, I would request an appropriation from the bond issue of an adequate sum to begin this work, and protested against the inauguration of any policy which would, so to speak, mortgage the bond issue to such an extent as to render impossible hospital construction to be paid for from funds obtained in this manner.

I understand that it was formally agreed that a reasonable expenditure from the bond issue for this purpose should be made. Fortunately, however, the improvement in the financial condition of the Insular Government makes possible the expenditure during the present year of a considerable sum from general revenues for public improvements. It is immaterial to me whether the necessary amount is appropriated from the bond issue or from other Insular funds, but I strongly urge upon the Commission that at this time it put an end to the present unsatisfactory conditions and make adequate provision for an institution which shall be a credit to the Insular Government. \* \*

In closing, I beg to suggest that the only considerable expenditure ever made by any of the Bureaus of the Department of the Interior for public improvement has been the comparatively small one involved in the construction of the new building of the Bureau of Science, while very large sums have been expended for public improvements by other Departments of the Insular Government. I feel that it is no more than just that this great need of the Department, which is at the same time a public need, should now be met.

I have myself been repeatedly publicly charged with delaying the work of hospital construction. The members of the Commission, at least, are well aware that I have favored only such delay as would allow the securing of a proper site and of adequate plans. Inasmuch as the amount expended must necessarily be large, I have determined that the necessary steps should be taken to secure wise expenditure before I would make recommendation to the Commission. The hospital plans originally prepared by the former Chief of the Bureau of Architecture and Construction of Public Buildings involved what was, in my opinion, an extravagant expenditure and I was therefore not prepared to recommend their adoption. The plans prepared by the Consulting Architect seem to be the best that we can secure and I think that they should be adopted.

It is probably needless for me to say anything in regard to the site for these buildings as this has been fixed long since by the Commission and so far as I know there is no purpose at this time to reverse the action then taken. There is, however, every reason why the buildings should be put on the Exposition Grounds. This site is cool and can readily be made sanitary. It is well removed from noise and dust and there is sufficient ground to allow for all probable future development. Proximity of the building of the Bureau of Science will be a very great convenience and will save some little expense.

I am more than ever convinced that this piece of ground should be reserved for the scientific work of the Insular Government.

Quoting further from the address of the Secretary of the Interior upon the occasion of the laying of the cornerstone we find the later history of the formative period of the hospital related as follows:

As rapidly as possible Mr. W. E. Parsons, the Consulting Architect to the Commission, prepared preliminary plans and estimates, and prior to the departure of the Secretary of the Interior for the United States in October 1906, they were transmitted to the Commission with an urgent request from that official and from the Director of Health that the necessary funds for carrying them out be immediately appropriated and the construction work inaugurated as soon as possible.

Other counsels prevailed, however, and the whole project was laid on the table where it was found peacefully reposing by the Secretary of the Interior on his return in April, 1907.

Before making final recommendation to the Commission, he deemed it fitting and desirable to secure the opinion of the faculty of the newly established Philippine Medical School as to the necessity for a Government general hospital. The faculty immediately approved the project but objected to the small number of beds planned for at the ouset, insisting that 300 should be provided for instead of 200 proposed. The arguments which they brought forward in favor of this course seemed unanswerable, and the Director of Health and the Secretary of the Interior united in requesting the Commission to appropriate the sum of \$\mathbb{P}780,000\$ in order to make possible the erection of a central administration building, a surgical pavilion with two operating rooms, a building for dispensary and outclinic, five ward pavilions of sixty beds each, a nurses' home, a kitchen, an ambulance stable, and morgue. By unanimous vote of the Philippine Commission the full sum requested was appropriated.

It was with a profound sense of gratification that those who had labored so long and earnestly for the completion of the project finally saw a chance for the realization of their hopes. With the necessary funds available the greatest obstacle had been swept away, although the real, active, hard work remained to be done as there were a multitude of details to be thought out and unforeseen complications arose continually.

A meeting of the Philippine Islands Medical Society was to be held in Manila early in 1908 and this was deemed an opportune occasion of the laying of the cornerstone of the new hospital. Accordingly, although no contracts had been let nor had the exact locations of the different structures been determined, the cornerstone was laid February 28, 1908.

Dr. Fernando Calderon, a leading Filipino physician of Manila, during an address upon this occasion made the following statements, several of which strike to the core of the subject:

The construction of the edifice whose cornerstone is laid today in this beautiful field endowed with unsurpassable hygienic conditions is an event which ought to be greeted with rejoicing by all the Filipino people.

It signifies in the political order that the Insular Government, abandoning the individualistic theory of laissez faire, is convinced that its sphere of action is not limited merely to administering justice and maintaining the liberty of the inhabitants of this archipelago, but that it must, in addition, watch over those neglected by fortune, the weak ones of society, supplying their most pressing necessities.

Among those necessities it is indubitable that the preservation of the life and the health of the citizens occupies first place; wherefore, the Government, inspired by the modern ideas of democratic and coöperative governments, and complying with a duty not merely moral and altruistic but juridicio-social, decided to build a public hospital sustained from public revenue for the benefit of the 7,000,000 inhabitants who people these Islands in general, and those neglected by fortune in particular.

The hospital will be named the Philippine General Hospital, because it will be destined principally for the use of the Filipino people. It will inaugurate its work with 350 beds, and will consist of several pavilions constructed in modern styles to avoid massing the patients.

It will have the following departments:

- 1. Administrative.
- 2. Surgical operating rooms.
- 3. Kitchen.
- 4. Dispensary.
- 5. Nurses' home.
- 6. Pavilion No. 1 (private rooms).
- 7. Pavilion No. 2 (surgical cases).
- 8. Pavilion No. 3 (medicine).
- 9. Pavilion No. 4 (children, medicine or orthopedics).
- 10. Pavilion No. 5 (obstetrics).

The first five departments, that is, those destined for administration, operating rooms, kitchen, dispensary, and the nurses' home, will be built of such size that they can serve permanently as the fundamental basis of the future hospital, even though it should become necessary in the future to construct a larger number of pavilions.

The pavilion of medicine will open its doors to the sick who belong to the group of medical pathology, and especially to those who are suffering from tropical diseases, from local causes of climatology, physiology, habits, customs, and alimentation. Difficult medico-social problems for the physical regeneration of the Filipino race will be solved in this pavilion of medicine.

The pavilion of surgery will be open to persons suffering from surgical affections, and in case operations are performed upon them, they will not be mixed with the patients in general medicine, there being thus constituted a certain guarantee against all infectious contamination.

And what shall I say of a pavilion destined for the sick children of

Manila where these tender beings die annually by thousands, the total of infant mortality ascending to a number capable of horrifying the most temperate mind? I shall say only two words: That it is a long-felt social necessity in order to be able to undertake clinical infantile diseases of Philippine type, as yet unknown to science.

Neither shall I dwell on the highly important services which, in its day, the future pavilion of obstetricts or clinic of parturition which is to be erected, will render to the women and children of our country, because all will comprehend the necessity for an ample, hygienic and comfortable place to which those unfortunate women can go to give birth, who now perform that transcendental act of life in miserable, insanitary huts, completely given over to charlatanism and the ignorance of the illegal practitioners who officiate as midwives, with great danger to them and their new-born babes.

A general hospital with 300 beds for a city like Manila with 220,000 inhabitants, in addition to the sick coming from the provinces is not, we may say, a very spacious hospital for completely filling the requirements of so numerous a population.

The systematic opponents of the projects, those traditional reactionaries of the first class who find nothing good except conversation and routine, will say, perhaps, that since some hospitals already exist in Manila why burden with this new weight the budget of the country which is now undergoing an economic crisis; but let such professional critics remember that what constitutes the nerve of human civilization in the present epoch is precisely public hygiene in the towns in general and the health of each citizen in particular, for which purposes modern governments do not spare expense to place them on the highest plane.

True, there are in Manila some hospitals of antiquated styles, in truth, such as San Juan de Dios, St. Paul's, the Civil Hospital, the University Hospital, and Bethany, which are far from answering the present needs of this city. I do not mention the sick-ward of Bilibid nor Hospital "B" of Bilibid Prison, nor the military hospitals located here, because they are for the exclusive use of prisoners and the Army. The San Lazaro pavilions do not constitute a hospital but only isolation houses for cases of cholera, bubonic plague, and smallpox.

The hospital of San Juan de Dios, to which the Filipino people owe immense gratitude, as it has really been the only beneficent establishment, which, from its own funds, and within its limited means has been admitting poor sick, at present maintains about 100 beds for the needy, apart from the 50 paid for by the city government.

St. Paul's Hospital has funds at its disposal to support only fourteen beds destined for poor children, as the other 100 beds for indigents which are there at present are paid for, 50 by the city and 50 by the Philippine Medical School.

The Civil Hospital does not support any, except a few for emergency cases, the University Hospital fifteen beds and Bethany Hospital, improperly so called because it is nothing more than a dispensary, supports six beds for children and poor women.

Not counting, then, those 150 official beds which the Government will take over by erecting its own hospital and putting its poor sick under better hospital conditions, how many beds for the poor sick would there then be available for the entire city of Manila? The insignificant number of 135 beds.

Thus this new edifice, capable of receiving 350 sick, a very small part of whom will be paying patients, comes to fill an immense void in the capital of the Archipelago.

It is plain that even with such a number of beds we shall still not have reached the *desideratum* of the aspirations directed towards sending to a hospital and caring for all the poor sick of the city of Manila and the surrounding provinces who may request aid. A hospital with capacity for a thousand patients would be necessary for this.

If, in this same manner that the American Congress every year votes the money necessary for the construction of four battleships, the Insular Government, imitating this example and adopting a definite program, were to grant, if only two years, money sufficient for the erection of a new pavilion destined for this general hospital, at the end of a few years we should see the realization of the beautiful ideal of being able to send to a hospital the poor sick who swarm Manila and the adjacent provinces.

The cornerstone was laid by the Secretary of the Interior, the Honorable Dean C. Worcester. A portion of his address delivered at this time is quoted below:

Our distinguished guest, Sir Allen Perry, in his eloquent and most interesting address, has brought forcibly to your attention the vital importance of adequate hospital facilities in the tropics, even suggesting as a criterion of civilization of a country, the number of its hospitals and the character of their equipment. His position entitles him to speak with authority on this subject, for perhaps in no other tropical country has hospital work reached so advanced a stage of development as in Ceylon.

Professor Calderon has clearly demonstrated the great need of government general hospital at Manila and has made plain the substantial benefits which will accrue from it to the people of that city and of the Philippine Archipelago.

If the statements of these gentlemen are true, and we know that they are true, the question naturally suggests itself, why has the Insular Government so long delayed the establishment of an institution which is destined to be so useful and which has been so imperatively needed?

It has fallen to my lot to give a brief review of the facts. Had I been requested to justify, in all particulars, the policy which has been pursued, I should have declined the honor. Speaking candidly, I am of the opinion that the establishment of a general hospital has been unduly delayed. Nevertheless, it is true that grave obstacles have been encountered, and the facts when stated will extenuate, even if they do not fully excuse, the course which has been pursued.

The present hospital situation in these Islands, so far at least as concerns Government institutions, is most abnormal. The Insular Government made provision for sufferers from bubonic plague, smallpox, cholera, leprosy, and other dangerous communicable diseases by the establishment of the San Lazaro Hospitals and the Culion Leper Colony. It has erected a fine hospital for the proper care of the insane. It has established admirably equipped quarantine stations at Manila, Cebu, and Iloilo. Yet, while very heavy expense has thus been incurred in caring for the insane, in providing hospital facilities for the comparatively limited number of sufferers from dangerous communicable diseases, and in preventing the introduction and checking the spread of such diseases, little has been done to relieve the afflictions of that larger portion of the population suffering

from ills which are not readily communicable to others and may be minimized, or completely relieved, by medical or surgical intervention.

We have, to be sure, free dispensaries in the city of Manila. We have also our Civil Hospital; but the latter institution is established in a group of three buildings which were intended for private residences and are not really suitable for hospital purposes. The largest of them has in its immediate vicinity marshy, mosquito breeding lands which can neither be drained nor filled at reasonable expense, and which necessarily render the site highly objectionable. Furthermore, the space available in this institution is to so large an extent required for Government officers and employees that at best comparatively few beds are available for the general public.

In order to make some provision for the needy poor of Manila and to secure necessary clinical facilities for the students of the Philippine Medical School, we have been forced to hire beds in private hospitals, and it is indeed fortunate that we have been able to do so.

At last this extraordinary condition of affairs is to be terminated. How is it that it has been allowed to continue so long?

Professor Calderon has just advanced the claim that the Philippine Medical School should be considered the mother of the Philippine General Hospital because of the adoption of the recommendation of its faculty that the number of beds to be established at the outset be increased to 300. He has assigned the relationship of grandmother to the Bureau of Science and that of great grandfather to myself.

May I be permitted to suggest that he has left a serious gap in the parentage of this lusty infant and to nominate for the important position of father the Director of Health, Dr. Victor G. Heiser. I regard the desire of the Medical School to establish relationship as a distinct compliment to the child. I have noticed that in the case of the public improvements in the Province of Benguet there was at one time a distinct willingness to accord to one man the honor of being the whole family of that infant, but later when the great highway to our summer capital had been completed and people had begun to realize what we had obtained for our money, there was no longer a lack of would be near relatives. Even an orphan can usually find foster parents if he becomes sufficiently promising as he develops. Far be it from me to try to keep the Philippine Medical School out of the General Hospital family, but a due regard for the verities of history compels me to call attention to the fact that a comparison of the date of conception of the General Hospital project with that of the date of the birth of the Philippine Medical School forever debars the latter institution from any claim of motherhood. To the Philippine Commission, which appropriated the necessary funds, should, I think, be assigned maternal honors in this case, but the valuable assistance rendered by the Philippine Medical School in moulding public opinion and in demanding a suitable increase in the number of beds certainly entitles it to rank as nurse.

We have met to-day to lay the cornerstone of the Philippine General Hospital. Although the delay in providing for this institution has been long and at times disheartening, we may well feel that it has in large measure been compensated for by the liberality of the provision which has now been made. The hospital has been planned on broad lines. With the very adequate facilities which it will have at the outset for administrative officers and for operative surgical work, its capacity can be almost indefinitely increased by the construction of additional ward pavilions. The

Exposition Grounds are amply large to admit such expansion and must be kept available for hospital purposes.

When the Philippine General Hospital, the Philippine Medical School and the Bureau of Science buildings stand, as they soon will stand, side by side, with the Bureau of Science working, as they have always worked and must always continue to work, hand in hand, this Government may, I think, feel that it is not only fulfilling its duty in safeguarding the health of the inhabitants of these Islands, but that it is contributing its full share toward the solution of the many grave problems involved in combating tropical diseases, and in making tropical countries not only habitable but healthful for men of every race. Who shall measure the future usefulness of the institution which we are about to found in alleviating human misery, in prolonging useful lives, and in training the men and women of this country as nurses, as physicians, and as surgeons? I count it both a great privilege and a high honor to lay its cornerstone.

The herculean task of perfecting plans and specifications for the different structures, in order to have them adapted to their purpose and at the same time be covered by the appropriation and the deciding of many other details consumed considerable time so that bids were not advertised for until June 24, 1908. When the bids were opened on July 27, it was found that the lowest bid had been made by H. Thurber, of the Manila Construction Company. He was accordingly awarded the contract for the erection of the administration, medical, surgical, maternity, private, orthopedic, and operating pavilions and the kitchen, on September 8, 1908 for the sum of \$\mathbb{P}\$530,804. His contract specified that these structures be of reinforced concrete and that they be completed within 240 working days. The plumbing, wiring, filling, and a few other minor details were not included in this bid.

Such in brief, is the early history of the institution and we now come to the more interesting stage of results obtained by nine years of striving.

#### DESCRIPTIVE.

Actual construction work was begun shortly after the awarding of the contract but the usual number of vexatious delays occurred, conferences were held and changes in plans made until it became evident that the buildings would not be completed within the specified time. The contractor asked for and received two extensions on the time contracted for; the sum of which extended the date for the completion of the structural work to November 30, 1909.

After the structures were erected the process of finishing the interior and obtaining and installing equipment necessitated several months so that the opening of the institution was deferred to a much later date than was originally intended.

The question of supervision of the hospital had been definitely settled by the passage of Act 1989, which took effect July 1, 1910. The portion of the Act covering this question reads as follows:

The Philippine General Hospital is hereby declared to be a division of the Bureau of Health, \* \* \* and the Director of Health shall cause to be furnished in the Philippine General Hospital care of Government patients as now required of him by Act Numbered Fourteen hundred and seven. Rules governing the admission of patients to the Philippine General Hospital, charges for hospital service and hospital administration shall be made by the Director of Health, subject to the approval of the Secretary of the Interior. Provided: That the selection of patients for admission to free beds set aside for the use of the Philippine Medical School shall be subject to such rules as the Board of Control of the Philippine Medical School may prescribe: and provided further: That the Director of Health, subject to the approval of the proper head of department or of the Board of Control of the Philippine Medical School, as the case may be, may require the services, without additional compensation, of any medical officer or employee in the Government Service. (Act No. 1989.)

The "General Statement" of the Secretary of the Interior written for the hospital rules and regulations contains some very pertinent facts as evidenced by the following extracts therefrom:

The Philippine General Hospital opened its doors to the public on September 1, 1910. This event marked the successful termination of efforts which had extended over many years. At the outset it was necessary to create in Manila a proper interest in the establishment of a large modern Government hospital. When this had been done, plans and estimates were necessary as a basis for a request for an appropriation. It was by no means easy to secure plans for a series of hospital buildings which would admit a maximum of light and air and at the same time should not become excessively hot during the middle of the day; nor was it easy always to harmonize the technical requirements deemed essential by the Director of Health and the Secretary of the Interior with the artistic features advocated by the Consulting Architect. A long time necessarily passed before final plans were agreed upon, but it is believed that it was time well spent.

Immediately adjacent to its grounds are the buildings of the Bureau of Science with excellent laboratory facilities, and the building of the Philippine Medical School. This gives an ideal arrangement. Laboratory work for the hospital is performed by the staff of the Bureau of Science. Access to the hospital and to the library and laboratories of the Bureau of Science is easy for medical students, and the hospital profits by the services of physicians and surgeons who are employees of the Bureau of Science and of the Philippine Medical School.

Under this arrangement, which makes possible the utilization of the best men in the service in connection with hospital work for which they have demonstrated special aptitude, it has been possible to organize a staff of very exceptional ability. It should not be supposed, however, that patients of the hospital have any limitation imposed on their choice of physician or surgeon. The institution is open to every reputable practitioner and every patient has the right to call the physician or surgeon of his choice.

The Philippine General Hospital will fulfill four distinct needs.

It will offer to the general public exceptionally good facilities for the healing of injuries and the curing of diseases.

It will assure to officers and employees of the Government, who are entitled to have medical or surgical care free of charge, a quality of attendance seldom equaled and it is believed never excelled under similar conditions.

It will offer to medical students exceptional facilities for *practical* instruction. For the outset there will be one hundred free beds which will be used for purposes of instruction in connection with the Philippine Medical School, and the teaching clinic of the institution will be open to any properly accredited student of medicine and surgery.

Thus the hospital will from the outset not only meet the needs of Government officers and employees and those of many private citizens who are able and willing to pay for the accommodations and services which it

affords, but will be a great public charity as well.

Finally, it will accomplish another very important work in the training of young Filipino men and women as nurses. Many of these nurses will go out into the provinces as veritable missionaries of modern medicine, surgery, and hygiene with the natural result that thousands of lives will be saved among those who to-day have little or no understanding of the importance of availing themselves, when injured or ill, of the facilities which modern hospitals afford. One of the most important things to be done is to arrange a systematic search in the provinces for surgical cases which are operably relievable, bring such cases to the hospital where they can be dealt with under most favorable conditions and keep them there until recovery is well advanced or is complete.

The future development of the work of the Philippine Medical School, the Philippine General Hospital and other divisions of the Bureau of Health, and the Biological Laboratory of the Bureau of Science will not only relieve an immense amount of avoidable human suffering, but will ultimately bring about the hygienic regeneration of the Philippine Islands by their own people. Meanwhile we may hope for the carrying out of scientific investigation leading to results of very great importance to this and other tropical countries.

As previously stated, the long looked and hoped for day arrived and the hospital was officially opened on September 1, 1910, and a largely attended public reception was held in the hospital in honor of the event. On the following day ten patients were transferred from the old Civil Hospital to the new structure; coincident with this act the former institution passed into oblivion after more than nine years of useful, if somewhat turbulent, existence.

The new hospital is situated nearly in the center of a tract of land bounded by Calle Padre Faura on the north, Taft Avenue on the east, Calle Herran on the south, and the weather observatory grounds on the west. This tract contains nearly 11 hectares (27 acres) and is known as "Medical Center" on account of the Bureau of Science and the College of Medicine and Surgery being located on the same plot. (See block plan). It is most conveniently located, being well within the city limits and accessible by two trolley lines.

A new set of rules and regulations were promulgated and inasmuch as it is a Government institution and physicians are permitted to treat private office patients in the hospital these rules were, of necessity, peculiar to this hospital. Many problems have had to be solved and new rulings made; however, in spite of all the obstacles encountered, it has gained steadily in popularity and efficiency due in part to the hard work and persistent efforts of the acting superintendent.

The moral influence of the hospital and object lessons taught patients and servants along the line of cleanliness and sanitation are bound, ultimately, to make their influence apparent in the home lives of the people and this brings to light another field of its usefulness.

The Superintendent in his annual report sums up the objects of the hospital as follows:

The objects to be accomplished by the Philippine General Hospital are varied. The patients also fall into a number of classes:

The following table outlines both objects and classes:

To care for Government employees when sick ...... Beneficiaries. To provide hospital service for the

city's poor and injured..... City contract patients.

To provide hospital accommodations for the general public...... Pay patients.

To provide hospital accommodations for such poor and needy as have diseases which are useful and in-

teresting for clinical instruction.. Medical College patients.

To provide a hospital where research work and study of disease. its cause and cure, may be unrestrictedly pursued ...... Scientific cases.

To provide immediate treatment for the injured, or actually ill, without any other aim than to be of

help in time of need..... Charity cases.

There are four fundamental functions that are paramount in this hospital. They are as follows, arranged according to their rank and importance:

The Patients.-Care and treatment of the sick and injured.

The Disease.—Research and study of disease.

The Doctor.—Education of physicians.

The Nurse.—Education of nurses.

## GENERAL AND SPECIAL FEATURES.

Ambulance service.—Patients are transferred to and from the hospital by means of electric ambulances, by means of which the transfer is made in the shortest possible time and giving them the greatest degree of comfort possible during this time.

physician accompanies the ambulance and gives the patient any necessary attention during the trip to the hospital. The new garage and waiting shed has been completed and has sufficient capacity for the accommodation of 2 ambulances, 4 automobiles, 12 calesas and 6 victorias.

Beds.—The type of bed furnished a patient has much to do with his bodily comfort and equanimity of mind. The beds with which the hospital is equipped are admirably adapted to give the best results along these lines. They are three-quarter size iron, white enameled, have good springs and mattresses and are supplied with five-inch rubber tired wheels, which make it very easy to move them from place to place noiselessly and without jarring the patient. A number of the adaptable "peritonitis" beds are in use and are a very valuable adjunct to the comfort of certain classes of patients in that they may be adapted to any position or angle in which it may be desired to place a patient.

Clocks.—Upon entering the vestibule, a large clock is seen to the left; this is the master of the system of electric self-winding and regulating clocks with which the hospital is equipped. They are distributed as follows:

Administration pavilion	5
Surgical pavilion	2
Medical pavilion	2
Maternity pavilion	2
Orthopedic pavilion	2
Private pavilion	2
Operating pavilion	4
Kitchen pavilion	1
Nurses' home	2
Dispensary	1
Garage	1

The master of the night watchman's checking system is located in the main office and substations are found in all parts of the hospital. The watchman is required to register at each of these stations at stated intervals.

Electric fans.—The entire hospital is provided with facilities for the use of electric fans; while in some instances a charge is made for them, it is very moderate, and many a weary sufferer is afforded a great deal of comfort by their use.

Furniture.—The furniture is made of native hard wood, which when polished, closely resembles mahogany. The doors and other woodwork are also made from this class of wood.

Grounds.—The hospital grounds are gradually being laid out and parked according to the scheme of an expert in this line of work, and when completed will be most pleasing to the eye;

palm trees are being planted and plants and shrubs set out in conformity with the general plan.

Linen and silver.—The table linen bears the coat of arms of the Philippine Government and the seal of the Bureau of Health, both of which are woven into the cloth. The towels have the words "Bureau of Health" woven into them. Sheets and pillow cases have the words "Bureau of Health" stamped on them. The hospital silver is neatly engraved with the Bureau of Health monogram.

Telephones.—Four trunk lines enter the building from the outside and connect with a local exchange in charge of a Filipina operator; twenty-nine telephones located in private rooms and various other parts of the hospital give a very satisfactory service as one may talk over the city lines from any one of these house telephones.

The operator also has charge of the system of call bells for summoning the resident physicians and superintendent; each person has a certain number of rings assigned him as his call, and when in use the call rings simultaneously in all parts of the hospital; this system solves what would otherwise be a most annoying and difficult problem in an institution of this size.

Ventilation.—Even the most critical can find no fault with the ventilating scheme of the hospital as practically the whole sides of the pavilion may be thrown open by means of the sliding doors with which they are supplied; these doors open on a veranda, where many patients are made comfortable during the day. It was originally intended to screen the whole institution but this idea was later abandoned and nets were placed on the beds to exclude mosquitoes, flies, and other insects.

Water closets.—A number of the Capoco plate vitreous china closets with "Sanitoure Pyralin" seats have been installed in the hospital. They, apparently, are the last word in this line of equipment from a sanitary standpoint.

#### ADMINISTRATION PAVILION.

Upon entering the hospital by the main entrance one is at once favorably impressed by the magnitude and pleasing appearance of the vestibule which extends to the full height of the building. On either side are seen attractive iron gratings separating the record room from the vestibule on one side, and from the main office on the other. The floor is laid with large, square, black alternating with white vitrified tiling. A telephone has been placed here for the accommodation of the public. A touch of decoration is supplied by the presence of a number of potted

plants. In the main office to the right are located desks for the use of the superintendent, chief clerk, chief nurse, supervising nurse, and their stenographers. Two stenographers are employed here for the sole purpose of writing up records. This is one of the busiest parts of the hospital as practically all the business and financial details are attended to here and in an institution of this size this necessarily involves a vast amount of work.

A large fireproof vault is built into the wall of this office in which are kept valuable records, and silver which is not in use. Upon request, patients' valuables are stored here free of charge.

The office is light, airy and sufficiently large to avoid crowding; at night it is amply lighted by electricity. Corrugated iron doors are in use though solid wooden doors are also provided.

Adjoining the office is the supply room where supplies are distributed to the wards, upon requisition, at stated intervals. The next two rooms are utilized for receiving ambulance patients.

To the left of the vestibule are found the record and interns' room. Here are stored case records and other matter of a similar nature; this room also serves as a physicians' office and conference room. Adjacent to the record and interns' room there is a room which has been designed for a library in which will be installed book shelves and library furniture and which will contain a number of modern works on medicine and surgery. The balance of the rooms on this floor are used as private offices by the resident physicians.

The second floor is given up to bed rooms for the resident physicians with the exception of a large room which is at present used as a storeroom.

For the exact location and size of rooms the reader is referred to the floor plans of the various pavilions.

It is interesting to note that the first meeting of the Far Eastern Association of Tropical Medicine was held in this pavilion in March 1909.

#### MEDICAL AND SURGICAL PAVILIONS.

The medical, surgical and orthopedic pavilions are arranged in practically the same manner; for this reason only the surgical pavilion floor plans are reproduced. The three buildings have, on each floor, a large ward capable of holding sixty beds, and a smaller one intended for fifteen beds.

The private pavilion contains a twenty-bed ward, a two-bed isolation ward, and sixteen private rooms on each floor. The first floor was occupied on March 25, 1911.

The second floor of the obstetrical pavilion contains twelve

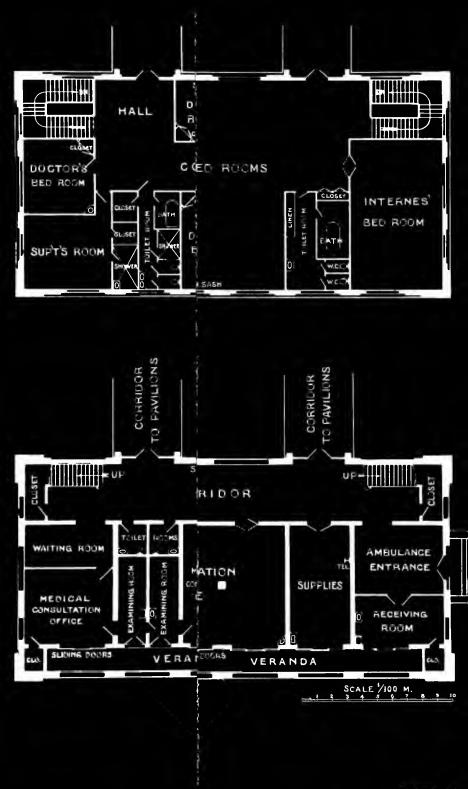


PLATE V

private rooms, a twelve-bed ward, a nursery for newborn babies, a delivery room, a sterilizing room, and a physicians' waiting room. The doors of the nursery are solid and tight fitting so that patients on this floor are annoyed as little as possible by the crying of the babies. The first floor, or Filipina maternity, contains a thirty-bed ward, a twenty-bed ward, an isolation room for infected cases, a delivery room, a babies' bath, and a physicians' waiting room.

All of these floors are provided with a diet kitchen, two bath rooms, toilet and slop room, linen room, and lockers for patients' effects. They are also provided with annunciators, telephones, and other modern conveniences.

#### OPERATING PAVILION.

This most important component part of the modern hospital is centrally located with reference to the other pavilions. The structure is 15.4 by 22.1 meters in size and is two stories high. The relative locations of the various units comprising the whole are shown on the floor plans of the building; in this connection let it suffice to state that the various rooms are conveniently located and that the construction and plumbing are thoroughly sanitary in every respect.

On the second floor are found two operating amphitheaters each with a seating capacity, for spectators, of about eighty and another room for fifty. Clinics are held here for the medical school students; in fact all ward surgery is done in these rooms. The floors of the whole pavilion are laid with 2-inch white hexagonal tile and floor corners are rounded to permit of thorough cleansing. The rooms are well supplied with modern surgical instruments and appliances and one has only to visit the pavilion any morning to realize the large amount of work that is being done there.

A very valuable addition to the operating room equipment is the Carl Zeiss electrical illuminating device for operating theaters.

Dr. McDill has kindly furnished the following description of this apparatus:

The cloudy days so frequent during half the year in Manila interfere, to a very great degree, with clinical surgical instruction. One of the two new operating amphitheaters in the hospital is equipped with the Zeiss illuminating apparatus.

The light is derived from a 30-amper search light, located in the corridor outside of the operating room, which projects a shaft of intense light through a hole in the wall after passing through a chamber containing distilled water; the water is kept cool by circulating between the chamber and a box at one side; this cools the light.

The main shaft of light strikes a target containing eight distributing

mirrors (see illustration), each of which reflects its light to a corresponding mirror attached to the ceiling, only five of these show in the illustration; a horizontal distributing mirror, the same height as the operating

table, is used to illuminate the field in perineal work.

Each of these eight illuminating mirrors, one of which is for vertical rays, reflects its pencil of light to a circle corresponding to its own size on the desired point on the operating table; hence, as all of these pencils of light converge at one spot, the illumination effected is a seven-sided, intensive illumination of the operative field and of any wound, no matter how deep.

The illumination is free from heavy shadows and is uninterrupted when operators and assistants stand in the rays from even four of the mirrors.

Spectators in the rear of the ampitheater can easily recognize anato-

mical details that formerly were visible only to the operator.

The advantages gained by the use of this apparatus are as valuable to the operator as to the spectator; there being no noise, no heat and no eye-strain. There is no possibility of dust dropping into a wound from this apparatus and lastly it is easily kept in working order.

On the first floor a fully equipped private operating room is found, which is open to any reputable surgeon.

The whole pavilion is well lighted with electricity, plumbed for hot and cold water, supplied with electric call bells, telephones, and other conveniences.

Each floor is provided with an up-to-date sterilizing room, containing the recognized apparatus of the modern sterilizing room.

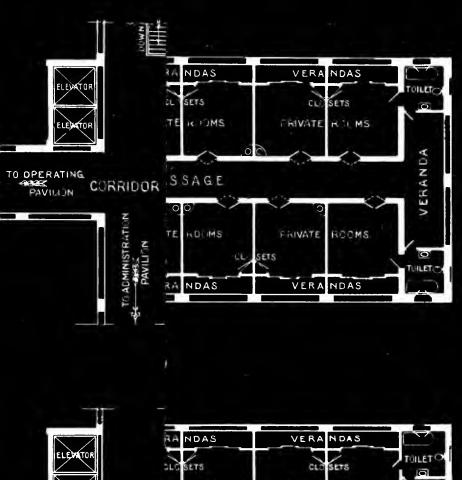
A room on the ground floor is fitted up for eye, ear, nose, and throat work and contains equipment of sufficient quantity and quality to care for any class of disease belonging to this department in the best possible manner.

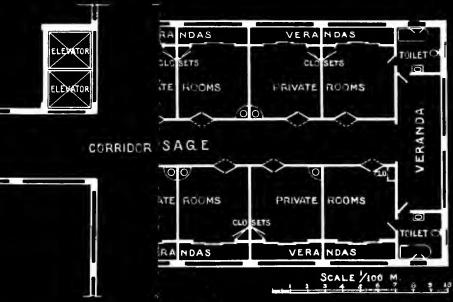
Another very important aid to efficiency, located on the first floor of the surgical pavilion, is the X-Ray and Electro-Therapeutic department. This work was taken up on January 10, 1911, and until July 1, 1911, a total of 120 photographs had been taken, 90 fluoroscopic examinations made and 128 electrical treatments given for carcinoma, epithelioma, lupus, exophthalmic goiter, blastomycosis, dhobie itch, acne, leukemia, and similar diseases.

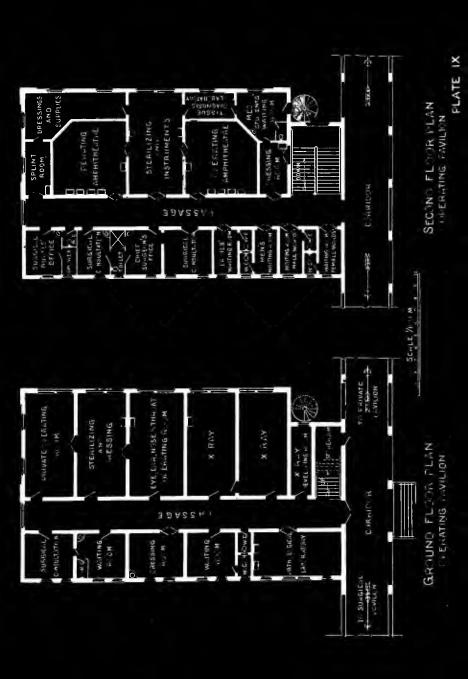
The equipment of this department includes a powerful interrupterless Roentgen ray machine; high frequency apparatus for giving the various forms of electrical treatment; a modern electric diagnosis apparatus including sigmoidoscopes and exploratory lamps; diagnostic and treatment combinations for the electrical treatment of the kidneys, bladder, etc.

Plans have been drawn for a complete mechano-therapy plant which, when completed, will supply every need along the lines of electro and hydrotherapy. The plans call for a two-story building in which one floor shall be devoted to Russian and

LATE VII







Turkish baths, bath battery, hydrotherapy, the Schott treatment and exercises, and a complete Zander outfit with the necessary dressing rooms.

The second floor to be occupied by the Roentgen ray, electrical diagnosis, and treatment departments.

It is hoped to connect with it a modern cooled ward for the treatment of the various tropical neurasthenias and it is believed that much can be done to alleviate these annoying and persistent disorders with this method of treatment. The whole plant is, of course, to be under the management of trained experts in their different specialties.

## CULINARY DEPARTMENT.

Probably no other department of a hospital has to bear the brunt of so much fault finding and causes so much dissatisfaction as that concerned with the selection, cooking, and serving of patients' food. This, of course, is partly on account of the average patient's not knowing exactly what he does want or not wanting anything, but unfortunately the patient is often justified in com-Rarely does one find a hospital where so little cause for dissatisfaction along this line exists as in the Philippine General Hospital. The writer has been in the hospital both as guest and patient, and is pleased to be able to state that there was no opportunity for finding fault with the quantity or quality of the food. Another feature which is a source of much satisfaction to the average person is that the housekeeper visits the private patients daily to ascertain what particular articles of food they desire. If not contraindicated their wants are carried out.

The kitchen is two stories in height with no second floor thus giving abundant air space. It is 12.7 by 21.33 meters in size, is located at the rear of the present group of buildings and has a main kitchen and five side rooms.

The kitchen proper contains a duplex double-faced range with six holes, four ovens, and four fire boxes. It is 1.92 by 4.72 meters in size and possesses the necessary appurtenances for both plain and fancy cooking; steam heated, metal tea, coffee, hot water, and milk urns, are also conveniently placed here, the first three having-a capacity of 40 liters each and the one for hot milk a capacity of 15 liters; another very necessary appliance found here is the steam table, the cooked food is placed in copper containers and deposited on this table until such time as it is transferred to the food trucks to be wheeled to the pavilions, when it is placed in other copper containers having hot water compartments; the containers with their contents are placed on the truck

thus insuring the food's being kept warm. There are also a copper steam rice cooker having a capacity of 150 liters; a steam soup kettle with a capacity of approximately 150 liters; two steam cereal and vegetable cookers holding 35 liters each, and two earthenware steam vegetable cookers with a capacity of 24 liters each, all of which add materially to efficiency and despatch in the cooking and serving of food; copper pipes carry the steam from all these cookers to the outside of the building. A large porcelain refrigerator is kept here to supply cold water and for the storage of smaller quantities of edibles. In addition this room contains the necessary serving tables, sinks, and other equipment of the modern kitchen.

In the side rooms are to be found kitchen utensils and supplies among which are an electric ice cream freezer having a capacity of about 35 liters, an electric bread cutter, a meat chopper and a potato parer. In a small room adjoining the refrigerating plant is located the dynamo which operates the brine pumps for the cold storage plant. The main refrigerator is 2.70 by 3.18 meters in size and the cold store room adjoining is the same size. In this room are kept the perishable food supplies.

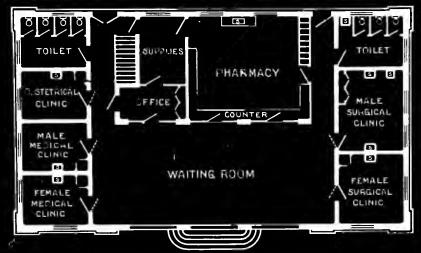
## DISPENSARY.

The free dispensary, situated to the southeast of the hospital is an attractive two-story building 13.25 by 24 meters in size. It was one of the last of the present group of buildings to be completed, and was occupied on April 20, 1911. One has only to witness the number of persons passing in and out of it, however, to realize what an important link it constitutes in the chain of buildings.

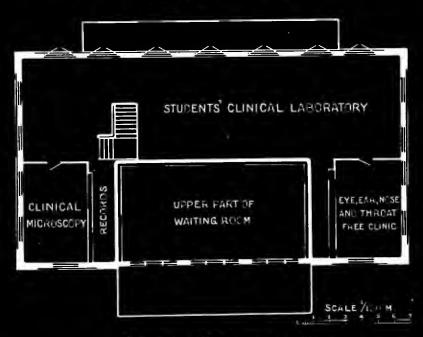
On the lower floor are to be found, on the East side, two medical clinic rooms, a sterilizing room fitted with everything necessary for preparing the necessary dressings for the out patient obstetrical department, and a toilet room containing four flush closets of latest design. The floor is of hexagonal white tile. On the west side are located two surgical clinic rooms, a dressing room and toilet with accommodations similar to the one The clinic rooms are provided with sinks and described above. lockers. The balance of the floor is occupied by the pharmacy and a waiting room. The pharmacy is very handsomely fitted up with polished native wood shelves and medicine cases, the bottles are provided with white enameled name plates upon which the names are printed in black lettering and are shelved according to size thus giving a very pleasing appearance. An average of about 200 prescriptions and 85 ward stock bottles are filled daily at the present time and the number is increasing constantly.

GROUND FLOOR PLAN

PLATE X



GROUND FLOOR PLAN
DISPENSARY



SECOND FLOOR PLAN DISPENSARY

On August 7, a total of 278 prescriptions and 85 stock bottles \*were filled; this amount of work taxes the working capacity of the pharmacy and of the force in charge.

The entire second floor is given up to laboratory work. In a room at one end the greater part of the clinical microscopy of the hospital is being done by an employee of the Bureau of Science, the balance of the floor being used as a class room for the College of Medicine and Surgery, where the students are given practical instruction in laboratory methods and technique. The floor is equipped with modern laboratory apparatus.

The building is equipped with gas, electricity, steam, and hot and cold water.

The following extract from the report of the Superintendent throws additional light on the work of the free dispensary:

The out patient or dispensary work at this hospital divides itself into three divisions, first the calls of Government beneficiaries, second the calls of private patients, third the patrons of the free dispensary.

A word concerning the third class. The patrons of the free dispensary and clinic have been increasing daily. Up to January 1, 1911, a free dispensary and clinic were conducted at St. Paul's Hospital by the staff of the Medical College. After January 1, 1911, this clinic was transferred to the Philippine General Hospital and was divided into three sections. (1) The medical, tuberculosis, obstetrical, skin, children, neurology, and genito-urinary clinics, with from 50 to 150 patients daily, were held in the new dispensary and the sick came to the hospital proper to get their medicines at the pharmacy, which until May 1911, was conducted in a room in the operating pavilion. (2) The eye, ear, nose, and throat clinic, with 30 to 50 patients daily, was conducted on the lower floor of the operating pavilion; and (3) the surgical clinic was, until June 16th, held in the dressing, sterilizing, and waiting rooms of the surgical pavilion. This third section was removed to the dispensary about the middle of June.

Numerous important problems presented themselves in conducting this out dispensary work. The question of bottles; the hours which the busy physicians of the hospital could devote to this important work; the character of the work, it being necessary to examine, diagnose, treat, and prescribe for the many patients within a reasonable period, which demanded the exercise of the highest skill and diagnostic ability; then the question of the vast quantities of medicine to supply 15,000 free patients annually, and the personnel to fill the prescriptions; questions as to whether the persons applying for free treatment were actually unable to pay; whether a small fee should not be charged for dressings and medicines; and how far charity should extend in providing those known to be in actual need with spectacles, crutches, trusses, wooden legs, glass eyes, and the like, some of which are yet to-be-worked-out problems.

#### DORMITORY.

The Dormitory or service building is three stories in height, the first two being constructed of reinforced concrete and the third of wood. Red tiles made locally of cement are used for the roof. The building is located in the rear of the hospital grounds and accommodates the druggist, attendants, male pupil nurses, clerks, Chinese employees, and servants. It will house 160 persons comfortably. Modern plumbing has been installed, ample locker rooms provided, and other conveniences supplied which make it admirably well suited for the purpose for which it is intended.

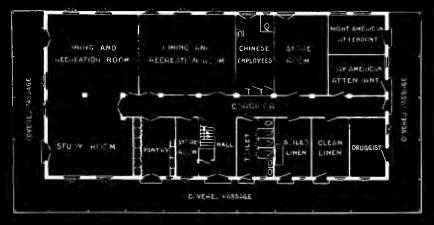
## NURSES' HOME AND NURSES.

The nurses' home is one of the most attractive buildings of the entire group, being well proportioned both inside and out. It is situated to the northeast of the Administration Building and is a reinforced concrete structure, as are all of the pavilions, 21.2 by 30.5 meters in size, with a cement tile roof and concrete floors.

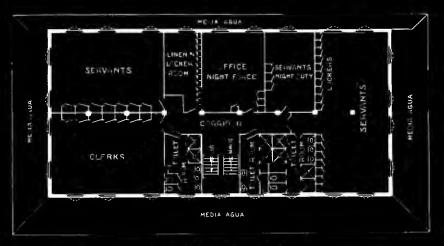
The home was not completed when the hospital was opened, thus making it necessary for the nurses to occupy one of the pavilions in the hospital proper. After much delay it was finally occupied on March 20, 1911, and has proved to be admirably well suited to the needs of the nurses.

There are six sleeping rooms on the first floor and twelve on the second. The rooms are large and with few exceptions open on spacious porches. Each room contains one, the larger rooms two, white enameled single beds with five-inch rubber tired wheels, a native hardwood dresser, a chiffonier, a writing desk, a bookcase, chairs, and bamboo tea tables. All are fitted with good-sized wardrobes, in the doors of which are built full length The rooms are splendidly lighted having three electric lights each with ornamental fixtures and they all have electric fan attachments. The floors are built flush with those of the piazzas making it a very easy matter to roll the beds out on the piazza, in order that those who so desire may sleep there; it is needless to say that the majority of the nurses take advantage of this opportunity as it is not only comfortable but very conducive to good health. The rooms are fitted with louver doors which admit the maximum amount of air. In addition to these they have solid wooden doors and solid transoms which may be used to shut out sound from the corridors; the nurses who necessarily have to sleep in the daytime find this a great convenience. Double doors open on the piazzas.

The dining room on the first floor seats about thirty persons comfortably, at three large tables. The floor is laid with a native hardwood. Beside the tables the room contains a large attractive sideboard, a buffet table, and chairs to match, all made from one of the native hardwoods resembling mahogany. It is



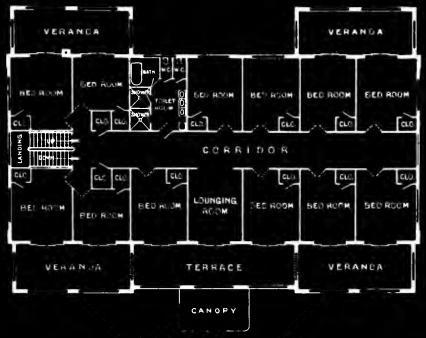
FIRST FLOOR PLAN SERVICE



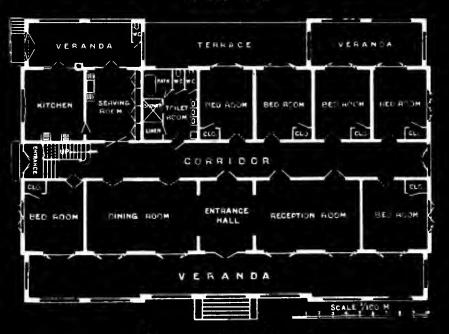
SECOND FLOOR PLAN SERVICE



SERVICE



SECOND FLOOR PLAN NURSES HOME



GROUND FLOOR PLAN NURSES'HOME

well lighted by two triangular electric light chandeliers of modern design and two wall lights with ornamental brackets. Two sets of double doors open on the piazza. The tables are supplied with electric call bells.

The reception room is large, airy, and tastefully furnished; has two double doors opening on the piazza, an arch opening into the main entrance, and two single doors opening into the corridor. It is well supplied with chairs, tables, and bookcases and contains a handsome couch. The furniture matches that in the other parts of the home. This room also contains a Concord Cabinet Grand piano, which it is needless to say is a source of much pleasure to the nurses. The lighting scheme here is in accord with that in the dining room.

The equipment of the toilet rooms, of which there is one on each floor, is the most modern that could be purchased. The floors are laid with white hexagonal tile, which makes them not only pleasing to the eye, but sanitary as well. Each room contains two showers and one tub bath, three wash basins, two closets and one slop hopper, all of these appliances are made of porcelain and are thoroughly sanitary in construction. Both rooms are plumbed for hot and cold water and are electrically lighted.

Each floor has a room for clean linen and drugs, as well as a soiled linen room. The second floor is also provided with a large lounging or sewing room.

Marble steps were used in the construction of the stairway connecting the first and second floors.

All doors opening on the verandas are provided with translucent shell panels thus giving the maximum amount of light when closed.

On the third story four roof gardens have been constructed, making an ideal location in which to enjoy the balmy evenings.

The kitchen and pantry are large and well ventilated and have hexagonal white tile floors. The pantry is well provided with shelves for dishes and drawers for linen, silver, and trays. The kitchen, pantry, and a section of the veranda are screened to prevent the entrance of flies and insects. A Leonard porcelain refrigerator, connected with the rain water drain, is kept on the veranda. Both rooms have hot and cold water plumbing and sinks with drip boards. A large army range is used to do the nurses' cooking. A toilet for the servants constitutes a part of the first floor equipment.

The front doors are made of scroll work iron and have a brass monogram of the letters N. H. attached.

The linen for the home was made to order in Japan and is stamped with the monogram N. H. as is the solid silver service.

The nurses have their private telephone line in the building, as well as the hospital line, which may also be used for outside The housekeeper answers all calls and pays all bills for Wednesday and Sunday evenings are termed "guest the nurses. nights" though friends may be invited to dinner any evening. Dancing is permitted until 11 p.m. Tea is served from 3 to 5 p. m. for the nurses going on or coming off duty. The day is divided into three shifts of eight hours, viz, 7 a. m. to 3 p. m., 3 p. m. to 11 p. m. and 11 p. m. to 7 a. m. The nurses are left on the same duty for one month and unless there exists special reasons for changing, they are left in the same department indefinitely, thus giving a nurse the opportunity to do the class of work she is especially interested in. The nurses of the Philippine General Hospital are given more privileges and shown more consideration in nearly every way than are those in the vast majority of hospitals. The reader must not infer from these statements that discipline is lax for good discipline is one of the strongest assets of the institution.

The Filipina nurses as a whole are a grand success. They are quiet, gentle, patient, and are making rapid progress along the line of proficiency. One very frequently hears patients make the statement that they would as soon have a good Filipina nurse care for them as an American. The Filipina nurses are living in dormitories a short distance from the hospital. Eventually they will have a home of their own on the hospital grounds. A photograph of the six girls constituting the first class graduated from the hospital will be found on another page and with their native costumes they make a very attractive group.

The male pupil nurses are rapidly acquiring the knowledge necessary to make them successful nurses and their ministrations will in the future undoubtedly prove to be a blessing to many of the sick of the Islands who have suffered heretofore without the care of either doctor or nurse.

American nurses will have to be employed to act as head nurses for some time to come, but with the efficient class of nurses coming from the States and the good-sized classes of proficient native nurses, which will be graduated annually from this time on, the nursing outlook for the Philippines is most promising. When the hospital was occupied September 2, 1910, the nursing force consisted of 15 American and 56 pupil nurses. On June 30, 1911, the nursing staff consisted of 18 American females, 5 American males, 69 female and 38 male pupil nurses, and 3 graduate Filipina nurses.

# RATES.

	Government pay patients.	All other pay patients.
MEDICAL AND SURGICAL CASES.	Per day.	Per day.
Class A wards	P2.00	P3.00
Class B wards	3.00	4.00
Ordinary private rooms Private rooms with bath	6.00	7.00
Private rooms with path	10.00	12.00
MATERNITY CASES. Class A wards		9.00
Class B wards	4.00	3.00 5.00
Class B wards Private rooms with two beds each person	5.00	7.00
Private rooms with one bed	7.00	8.00
SPECIAL RATES FOR CHILDREN.		
Well children up to 5 years of age kept in children's nursery Sick children up to 14 years of age.	1.50	2,00
Class A wards	1.00	1.50
Class B wards	2.00	3.00
Private rooms	4.00	5,00
FEES FOR SPECIAL NURSES.		
	Per week.	Per week.
For American nurses	40.00 30.00	50.00
For Pupil nurses	20.00	40.00 30.00
For pupil nurses. (Note. The hospital does not obligate itself to furnish special nurses but will do so when practicable, if they are desired.)	20.00	50.00
Ambulance fee	Nothing	P5 per trip
		within the city limits.
Operating room fee.	Mathina	10.00
Minor operation	Nothing Nothing	10.00 20.00
Anaesthetist's fees	Nothing	By private ar-
	_	arrange-
	Nothing	ment.
Dressing fees for out patients	Nothing	1.00
LABORATORY FEES (Bureau of Science).	11000000	1.00
Examinations of feces, sputum, or blood, each	Nothing	3,00
Examination of urine Other examinations. (Special list of prices furnished when re-	Nothing	5.00
quired.) All fees for biological and chemical examinations must be paid at the office. No officer or employee of the Burean of Science is		
allowed to accept private fees for laboratory work.		
RADIOGRAMS.	Nothing	10.00
Extremities, each	Nothing	20.00
Head asch	Nothing	20.00
Abdomen and hips, each	Nothing	30,00
FLUOROSCOPE EXAMINATIONS.		
	Nothing	5.00
Each	Morning	5.00
Electrical treatments will be administered only upon physicians' prescriptions, and charges will be made at the following rates.		
Galvanic. Faradic and other simple treatments	Nothing	2.50
Koentgen-ray treatments	Nothing	5.00
High frequency, ultraviolet, de Arsonivalization, Fulguration and other treatments requiring currents of high amperage	Nothing	5.00
Cystocopic sigmoidoscopic and similar examinations and treat-	37 .3 .	
	Nothing Nothing	5.00 5.00
Electro-diagnostic, reactins, etc	Minimig	J. 00
All fees for electrical treatment are payable to the Cashier at the office. Under no circumstances will the operator be allowed to receive fees.		
MISCELLANEOUS CHARGES.		
For use of electric for you dow	. 40	. 40
For use of electric fan, per dayFor extra meals, each	1.00	1.50
For messenger, per trip	. 50	. 50
Medicines and articles of diet not on regular lists will be charged for extra.		

## STATISTICAL.

On account of the fact that the hospital has been in operation for so short a period of time statistics would not be representative. No attempt will be made, therefore, to go into detail on this subject.

Unless otherwise stated reports given cover the period from September 1, 1910, to June 30, 1911.

## CAPACITY.

Six ward floors of 50 beds each	
Total	476

This computation does not take into account the number of new-born infants on either floor of the maternity pavilion. More than fifty patients can be accommodated on each of the six ward floors without undue crowding.

The hospital offers an excellent clinical field for medical students as 200 beds are always available for teaching purposes and material may be selected from approximately another 100 beds if it is desired to do so.

Total number of physicians, nurses, and employees in the hospital, including male and female training schools, on September 22, 1911, 352.

\*\*Expenditures and obligations.\*\*

Total appropriations for buildings and improve-	±1 000 000 00
ments to grounds	
Expended for equipment to June 30, 1911	153,447.25
Estimated outstanding obligations for equip-	
ment June 30, 1911	50,000.00
Total	1,284,346.34
Cost per bed.	
Cost of buildings and equipment	₱1,284,346.3 <b>4</b>
Total number of beds	
Cost per bed	
-	2,030.20
$Financial\ statement.$	
APPROPRIATIONS.	
Original appropriation, Act 1954	<b>₱</b> 780,000.00
Transfer from Medical School appropriation,	100,000.00
Act 1954	10,000.00
	10,000.00
Appropriation for completion and equipment,	
Act 1902	203,581.29
Transfer from appropriation for plumbing,	
Act 1954	30,375.28
Transfer of funds authorized by the Secretary	
of the Interior, December 28, 1910	56,942.52
Total	1,080,899,09

## BUILDING EXPENDITURES TO JUNE 30, 1911.

•	
Additions and alterations	₱48,737.21
Ambulance garage	9,672.35
Conduit	35,636.32
Construction main buildings	636,514.34
Dispensary	44,434.82
Drafting and blue prints	32,772.26
Foundations	1,284.99
Filling	38,181.72
Inspection of work	5,105.80
Installation of power, heating, light, and cable	63,917.66
Miscellaneous	14,248.83
Sewer system	11,234.70
Balance	14,935.60
<del>-</del>	
Total	1,080,899.09
MAINTENANCE EXPENSES.	
September 1, 1910, to June 30, 1911.	
Salaries and wages	₱63,569.38
Commutation of subsistence	5,323.13
Subsistence supplies	67,197.20
Light	6,195.81
Telephone, rent	868.79
Coal, oil, gas, and steam	4,782.66
Laundry, hospital	9,604.35
Laundry allowance	1,617.42
Transportation	1,981.63
Medicines, medical and surgical supplies	18,395.62
Repairs	349.04
Maintenance, grounds	3,802.72
Office supplies	1,138.90
Miscellaneous supplies	13,618.94
Incidentals	1,564.12
Salaries, laundry allowances, and subsistence of	
pupil nurses	30,221.20
Hospital equipment	153,447.25
Improvement on building	572.39
Total	384,250.55

# COST OF SUBSISTENCE.

Average cost pe	er day.	Average num- ber subsisted per day.	Average cost per person per day.
1910.		'	
September October November December	P95. 949 116. 989 133. 1413 179. 44	116 144 175 180	P0. 827 . 8124 . 7608 . 9968
1911.			
January February March April May June	204. 65 257. 117 253. 7838 269. 4493 315. 1841 326. 7353	224 316 332. 5 354. 7 399. 4 421. 5	. 9135 . 8136 . 763 . 7596 . 7891 . 7751
-	215. 24	266.31	. 82109

The following table illustrates the steady increase in the number of patients at the end of each month:

Patients.
43
58
60
65
132
214
204
215
291
284
324
353
10
354

# Patients admitted by Bureaus September 3, 1910, to June 30, 1911.

			,								
Bureau.	September.	October.	November.	December.	January.	February.	March.	April.	Мау.	June.	Total.
None		84 3 1 2	63 7 1 1	78 3 6	196 6 3 3	267 4 3	306 2 3 2	306 3 1 1	415 4 . 2	434 8 2 1	2, 100 41 21 8 8
Constabulary Customs Education Provincial Governments		7 4 10	9 10 18	9 3 16	7 6 12	6 4 20	6 8 15	9 7 17	10 3 29	10 6 18 4	77 50 161 4
Health Internal Revenue Justice Code Committee	3 3	7	13 8 1 1	7 2 1	9 6 6	12	9 2 1 2	9 4 1	16 7 6	18 8 4	108 84 24 8
Lands Navigation Posts Printing	4	6 13 2 4	10 2 4	2 8 4 2	1 15 1	2 7 1 8	2 7 6 7	2 9 6 2	6 12 8 2	5 16 2	33 107 30 27
Prisons Public Works Science Supply	<u>4</u>	1 10 4 6	1 12 3 2	1 9 3	2 11 4	1 15 1 3	3 8 3 2	10	21 7	1 11 10	12 111 36
Treasury Municipal Board Executive Assembly		6 14 8	23 1	10 10	2 25	 11 3	27 1	1 17 1	3 2 32 1	36 36 1	22 20 197 11 4
Total	68	132	191	162	316	366	423	409	589	690	3, 239

# Patients admitted from September 3, 1910, to June 30, 1911.

## Classification by residence.

Residence.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
City of Manila	51	108	163	130	268	230	375	358	489	470	2, 642
AlbayAmbos Camarines			2	2	1	1			2	1	9 2
Antique Bataan Batangas		1	2	2 2	2 4	77	1 2	3	3 4	5	19 19
Bulacan Capiz Cavite	1	3	2	4	6	8	9	14	1	22 1	72 5
Cebu Corregidor		2 1	2	1	8	6	6	3	13 1	9	50 5 1
Ilocos Norte Ilocos Sur Iloilo		1			1	4	2	1	1	3	10 10
Isabela Laguna La Union		2 1	2	1		3	5	1	9	17	39 4
Leyte Mindoro Moro			1	1		2	1	2	8	1	3 11
Mountain Negros Occidental				1		1		i	1	3	3 6 2 2 23 2 5
Nneva Caceres Nueva Ecija Negros Oriental	1		1	1 2	5 1	5		1	2	7	23 23 2
Palawan Pampanga Panay	<u>-</u>	<u>2</u> -	4	4	2	1	3	3	7	2	28 1
Pangasinan Rizal Samar	6	3 5	3 4 1	1 4	9	17	16	4 13	4 29 1	2 27	19 130 3
Surigao		1	2	1	1			1		2	2 6
		1	1	2	1 2	1	2	1	2 3 1	4 1	$^{11}_{12}$
Nueva Vizcaya Misamis				1					<u> </u>	1	· 1
Totals	63	132	191	. 162	315	365	423	409	589	590	3, 239

# Patients admitted monthly by nationalities.

#### From September 3, 1910, to June 30, 1911, inclusive.

Months.	Ameri- can.	Fili- pino.	Span- ish.	Eng- lish.	Other Euro- peans.	Chinese.	Japa- nese.	Other Asiatics.	Total.
September	19	40		2		ļ		2	63
October	57	69	1	3		1		l īl	132
November	78	95	1 4	9	2	i i	1	ī	191
December	69	88	l i	_	] 3	l ī	l	1	162
January	90	206	12		Ž	l 2	2	1	316
February	59	296	4	1	·	Ī	2	2	365
March	98	311	3	2	2	5	2		423
April	82	303	9	4	3	3	5		409
May	130	432	9	3	<del>-</del>	4	10	1	589
June	123	448	11	3		<b></b>	5	1	590
Totals	805	2, 288	54	27	12	18	27	8	3, 239

## Patients admitted September 3, 1910, to June 30, inclusive.

#### Classification by ages.

Ages.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	Total.
Under 30 days 30 days to 1 year 1 to 2 years 2 to 5 years. 5 to 10 years 15 to 20 years 20 to 25 years 25 to 30 years 30 to 40 years 40 to 50 years 50 to 60 years 60 to 70 years 70 to 80 years 80 to 90 years 90 to 100 years 90 to 100 years 70 to 80 years 90 to 100 years 70 to 80 years 90 to 100 years 70 to 90 years	1 9 19 15 11 5	l	1 1 2 4 1 3 10 43 45 50 19 4 2	1 5 3 2 3 4 12 25 34 42 13 3 3 2	1 3 2 16 20 50 55 94 31 10 11 1	2 5 8 4 14 18 53 49 64 57 36 17 16 4	1 11 9 9 10 10 35 69 65 97 45 24 8 6	1 13 3 10 11 12 34 75 62 106 34 21 2 1	4 14 8 9 12 20 72 101 87 127 62 17 26 4 1	14 14 18 21 23 63 95 84 120 59 28 12 6 3	14 70 44 62 76 108 315 563 532 743 315 125 88 26 8
Totals	63	132	196	162	315	365	423	409	589	590	3, 239

# Patients admitted monthly according to service and sex from September 3, 1910, to June 30, 1911, inclusive.

Service.	September.	October.	November.	December.	January.	February.	March.	April.	Мау.	June.	Total.
Surgical Medical Obstetrical Eye, ear, nose, and throat Children	25 35 1 2	37 73 15 3	59 105 15 3 9	75 54 12 9 12	123 143 26 17 6	170 131 36 10 18	201 152 31 14 25	185 138 40 18 28	257 198 36 45 43	242 183 51 66 48	1, 382 1, 212 262 185 195
Totals	63	132	191	162	315	365	423	409	589	590	3, 239
Male Female	48 15	92 40	120 71	118 44	215 100	245 120	277 146	268 141	400 189	354 236	2, 137 1, 102
Totals	63	132	191	162	315	365	423	409	589	590	8, 239

# Monthly report of the Clinical Division for October, 1911.

Total number of admissions	638
Total number of discharges (including transfers, etc.)	626
Total number of births	27
Total number of deaths	38
Total hospital days	92651
Average hospital days	148
Admissions { Male	
Medical	303
Surgical	199
Eye, ear, nose, etc.	92
Obstetrics	44

# The Electro-Therapeutic Department.

The X-ray department was opened for use January 10, 1911. Skiagrams were made as follows:

	Extre- mities.	Abdo- men.	Chest.	Head.	Total.
January February March April May. June	12 4 8 6 7 8	3 4 1 2 10 8	10 10 2	2 2 9 4 3 14	18 10 28 12 20 22
Totals	45	37	4	34	120

## Pathological Laboratory.

Uring exeminations	0.050
Urine examinations	2,852
Feces examinations	1,866
Sputum examinations	586
Blood examinations	274
Pus examinations	18
Stomach contents examined	14
Serums and cultures examined	16
Exudations, (acne, ear, etc.) examined)	
Total	5,654

## Prescriptions and ward orders were filled by months as follows:

	Pres- criptions.	Ward orders.	Totals.
1910.			
July	689	560	1,259
August		451	1, 276
September		502	1, 23
October		629	1, 404
November		920	1,884
December	948	1,054	2,002
1911.			
fanuary	2,300	1,669	3, 969
Pebruary		1,697	4, 521
March		2,092	5,880
April	3,478	2, 193	6,671
Vay	4,355	2, 292	6, 647
June	3, 938	2,309	6, 247
	25, 613	16,370	41, 983

July and August statistics are for the Civil Hospital. Largest number of prescriptions and ward orders filled in one day, 322. 107997——4

### FREE DISPENSARY.

Annual report for the fiscal year, 1911. July, 1, 1910, to June 30, 1911.

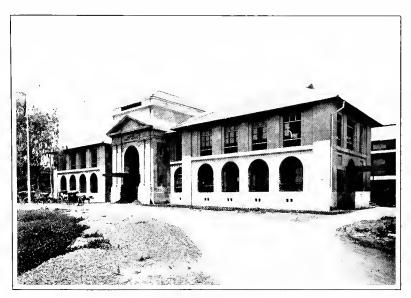
		July, 1910.	Au- gust, 1910.	Sep- tem- ber, 1910.	Octo- ber, 1910.	No- vem- ber, 1910.	De- cem- ber, 1910.
Number of patients:		1,806	1.938	2, 051	2, 292	2, 185	1,744
First visit		1,095	848	833	917	793	637
More than one visit		710	1,090	1, 218	1, 375	1, 392	1, 107
Males		875	1,073	1, 121	1, 174	1, 242	1,004
Females		719	661	676	866	770	620
Children		211	204	254	252	173	120
Medical clinic		442	422	470	476	424	376
Surgical clinic		493	680	656	608	665	621
Children clinic		195	171	165	211	168	109
Skin clinic		63	66	60	62	52	34
Obstetrical clinic		38	26	29	42	26	28
Tuberculosis clinic		386	378	379	496	515	359
Eye, ear, nose and throat clinic		160	264	229	346	271	163
Neurology clinic		24	26	29	34	42	31
Genito-urinary clinic		24	25	34	17	22	23
Number of prescriptions filled		3,016	3.091	3, 139	3,849	3,487	2,394
	Jan- uary, 1911.	Feb- ruary, 1911.	March, 1911.	April, 1911.	May, 1911.	June, 1911.	Grand total.
Number of patients: Total.	uary, 1911. 1, 112	1911.	1, 908	1911.	2, 975	2, 966	total.
Total First visit	uary, 1911. 1, 112 585	1, 467	1,908 986	1911. 1,892 964	2, 975 1, 458	2, 966 1, 510	24, 335 11, 375
Total First visit. More than one visit	uary, 1911. 1, 112 585 527	1,467 749 718	1,908 986 922	1,892 964 1,928	2, 975 1, 458 1, 617	2, 966 1, 510 1, 456	24, 335 11, 375 12, 960
Total First visit More than one visit Males	1, 112 585 527 642	1, 467 749 718 778	1, 908 986 922 959	1,892 964 1,928 971	2, 975 1, 458 1, 617 1, 569	2, 966 1, 510 1, 456 1, 523	24, 335 11, 375 12, 960 12, 931
Total First visit. More than one visit Males Females.	1, 112 585 527 642 377	1,467 749 718 778 550	1,908 986 922 959 740	1911. 1,892 964 1,928 971 743	2, 975 1, 458 1, 617 1, 569 1, 108	2, 966 1, 510 1, 456 1, 523 1, 098	24, 335 11, 375 12, 960 12, 931 8, 928
Total First visit. More than one visit Males Females Children	1,112 585 527 642 377 93	1, 467 749 718 778 550 139	1, 908 986 922 959 740 209	1,892 964 1,928 971 743 178	2, 975 1, 458 1, 517 1, 569 1, 108 298	2, 966 1, 510 1, 456 1, 523 1, 098 346	24, 335 11, 375 12, 960 12, 931 8, 928 2, 476
Total First visit. More than one visit Males Females Children Medical clinic	1,112 585 527 642 377 93 297	1, 467 749 718 778 550 139 437	1911. 1, 908 986 922 959 740 209 619	1,892 964 1,928 971 743 178 639	2, 975 1, 458 1, 517 1, 569 1, 108 298 924	2, 966 1, 510 1, 456 1, 523 1, 098 346 939	24, 335 11, 375 12, 960 12, 931 8, 928 2, 476 6, 465
Total First visit. More than one visit Males Females. Children Medical clinic Surgical clinic	uary, 1911. 1, 112 585 527 642 377 93 297 158	1, 467 749 718 778 650 139 437 255	1911. 1, 908 986 922 959 740 209 619 350	1911. 1,892 964 1,928 971 743 178 639 442	2, 975 1, 458 1, 517 1, 569 1, 108 298 298 643	2, 966 1, 510 1, 456 1, 523 1, 098 346 939 716	24, 335 11, 375 12, 960 12, 931 8, 928 2, 476 6, 465 6, 187
Total First visit. More than one visit Males Females Children Medical clinic Surgical clinic Children clinic	1, 112 585 527 642 377 93 297 158 81	1, 467 749 718 778 550 139 437 255	1911. 1,908 986 922 959 740 209 619 350 200	1911. 1,892 964 1,928 971 743 178 639 442 163	2, 975 1, 458 1, 517 1, 569 1, 108 298 924 643 283	2, 966 1, 510 1, 456 1, 523 1, 098 346 939 716 336	24, 335 11, 375 12, 960 12, 931 8, 928 2, 476 6, 465 6, 187 2, 207
Total First visit. More than one visit Males Females Children Medical clinic Surgical clinic Children clinic Skin clinic	1, 112 585 527 642 377 93 297 158 81	1, 467 749 718 778 550 139 437 255 126 50	1911. 1, 908 986 922 959 740 209 619 350 200 59	1911. 1,892 964 1,928 971 743 178 639 442 163 41	2, 975 1, 458 1, 517 1, 569 1, 108 298 924 643 283	2, 966 1, 510 1, 456 1, 523 1, 098 346 939 716 335 59	24, 335 11, 375 12, 960 12, 931 8, 928 2, 476 6, 465 6, 187 2, 207
Total First visit. More than one visit Males Females Children Medical clinic Surgical clinic Children clinic Skin clinic Obstetrical clinic	1, 112 585 527 642 377 93 297 158 81 65 63	1,467 749 718 778 550 139 437 255 126 50 23	1,908 986 922 959 740 209 619 350 200 59	1911. 1,892 964 1,928 971 743 178 639 442 163 41 20	2, 975 1, 458 1, 617 1, 569 1, 108 298 924 643 283 49	2, 966 1, 510 1, 456 1, 523 1, 098 346 939 716 335 59 38	24, 335 11, 375 12, 960 12, 931 8, 928 2, 476 6, 465 6, 187 2, 207 630 363
Total First visit. More than one visit Males Females. Children Medical clinic Surgical clinic Children clinic Skin clinic Obstetrical clinic Tuberculosis clinic.	1, 112 585 527 642 377 93 297 158 81 65 31 227	1, 467 749 718 550 139 437 255 126 50 23 300	1911. 1, 908 986 922 959 740 209 619 350 200 59 33 377	1911. 1,892 964 1,928 971 743 178 639 442 163 41 20 322	2, 975 1, 458 1, 517 1, 569 1, 108 298 924 643 283 49 30 422	2, 966 1, 510 1, 456 1, 523 1, 598 346 939 716 336 59 38 298	24, 335 11, 375 12, 960 12, 931 8, 928 2, 476 6, 465 6, 187 2, 207 630 363 4, 459
Total First visit.  More than one visit Males Females. Children Medical clinic Surgical clinic Children clinic Skin clinic Obstetrical clinic Tuberculosis clinic. Eye, ear, nose and throat clinic	1,112 585 527 642 377 158 811 65 31 227	1,467 749 718 778 650 139 437 265 126 50 23 300 216	1911. 1, 908 986 922 959 740 209 619 350 200 59 33 377 206	1911. 1,892 964 1,928 971 743 178 639 442 163 41 20 322 221	2, 975 1, 458 1, 617 1, 169 1, 108 298 924 643 283 49 30 422 562	2, 966 1, 510 1, 456 1, 523 1, 098 346 939 716 336 59 38 298 298 527	24, 335 11, 375 12, 960 12, 931 8, 923 2, 476 6, 465 6, 187 2, 207 630 363 4, 459 3, 351
Total First visit More than one visit Males Females Children Medical clinic Surgical clinic Children clinic Skin clinic Obstetrical clinic Tuberculosis clinic Eye, ear, nose and throat clinic Neurology clinic	1, 112 585 527 642 377 93 297 158 81 65 31 227 207	1,467 749 718 778 550 139 437 255 126 50 23 300 216 30	1, 908 986 922 959 740 209 619 350 200 59 33 377 206 26	1,892 964 1,928 971 743 178 639 442 163 41 20 322 221	2, 975 1, 458 1, 617 1, 569 1, 108 298 924 643 283 49 30 422 562 27	2, 966 1, 510 1, 456 1, 523 1, 098 346 939 716 336 59 38 298 527	24, 335 11, 375 12, 960 12, 931 8, 928 2, 476 6, 466 6, 466 6, 487 2, 207 630 363 4, 459 3, 351 323
Total First visit.  More than one visit Males Females. Children Medical clinic Surgical clinic Children clinic Skin clinic Obstetrical clinic Tuberculosis clinic. Eye, ear, nose and throat clinic	1,112 585 527 642 377 158 811 65 31 227	1,467 749 718 778 650 139 437 265 126 50 23 300 216	1911. 1, 908 986 922 959 740 209 619 350 200 59 33 377 206	1911. 1,892 964 1,928 971 743 178 639 442 163 41 20 322 221	2, 975 1, 458 1, 617 1, 169 1, 108 298 924 643 283 49 30 422 562	2, 966 1, 510 1, 456 1, 523 1, 098 346 939 716 336 59 38 298 298 527	24, 335 11, 375 12, 960 12, 931 8, 928 6, 466 6, 187 2, 207 630 363 4, 459 3, 351

Note.-Reports for July and August are Civil Hospital statistics.

Monthly report of free dispensary, for the month of October, 1911.

## Number of patients:

Total	6,320
First visit	2,529
More than one visit	3,791
Males	3,312
Females	2,273
Children	735
Medical clinic	1,890
Surgical clinic	1,948
Children clinic	338
Skin clinic	254
Obstetrical clinic	47
Tuberculosis clinic	461
Eye, ear, nose, and throat clinic	1.260
Neurology clinic	54
Genito-urinary clinic	68
Number of prescriptions filled	6,146

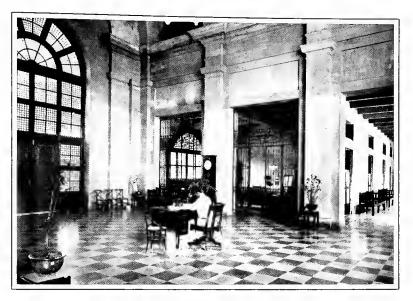


ADMINISTRATION PAVILION.



MEDICAL CONSULTATION OFFICE, ADMINISTRATION PAVILION.

PLATE XIV.



VESTIBULE, ADMINISTRATION PAVILION.



MAIN OFFICE, ADMINISTRATION PAVILION.

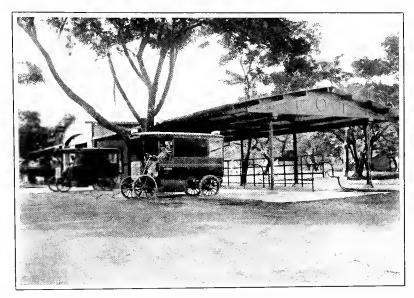
PLATE XV.



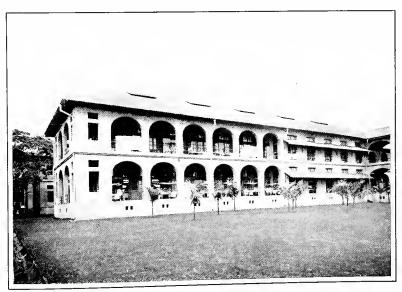
COURT FACING FRONT OF ADMINISTRATION PAVILION.



COURT FACING REAR OF ADMINISTRATION PAVILION.  $\mathbf{PLATE} \ \ \mathbf{XVI}.$ 



GARAGE AND AMBULANCES.

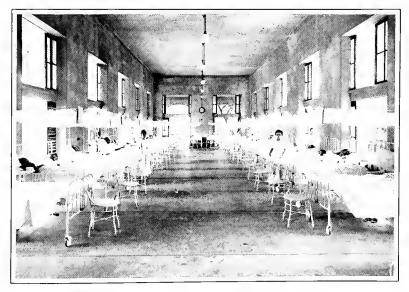


SURGICAL PAVILION.

PLATE XVII.



PRIVATE ROOM.

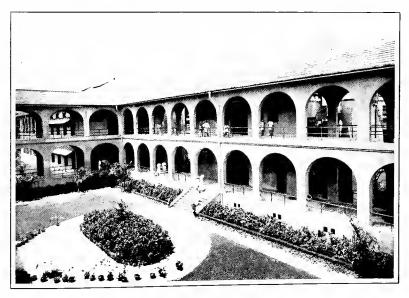


FEMALE WARD,

PLATE XVIII.

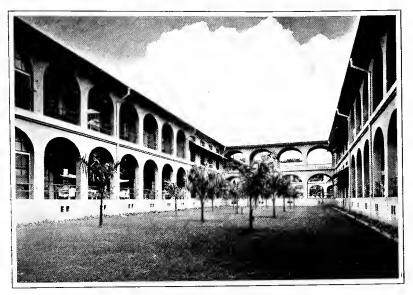


CORRIDOR.



COURT AND CORRIDORS.

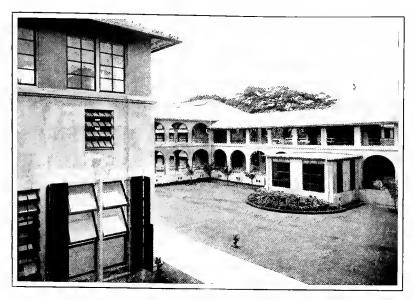
PLATE XIX.



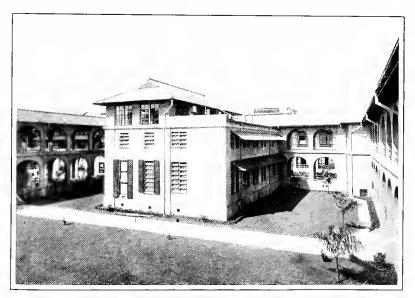
COURTYARD BETWEEN PAVILIONS.



ACACIA TREES IN HOSPITAL GROUNDS.  $\mathbf{PLATE} \ \ \mathbf{XX}.$ 



OPEN COURT AT REAR OF OPERATING PAVILION.

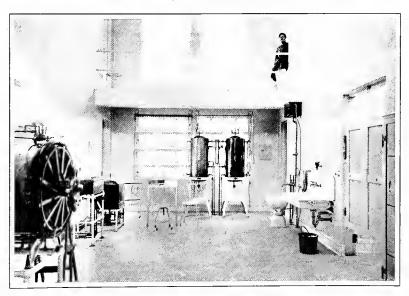


OPERATING PAVILION.

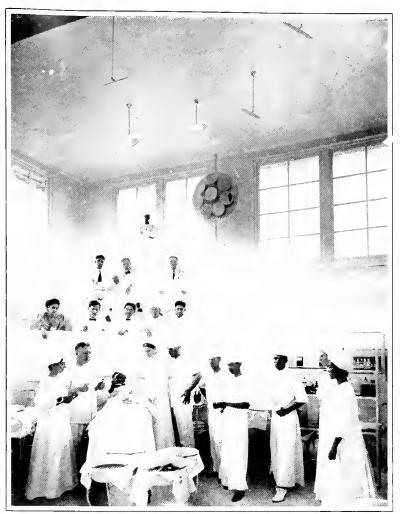
PLATE XXI.



CORRIDOR, OPERATING PAVILION.



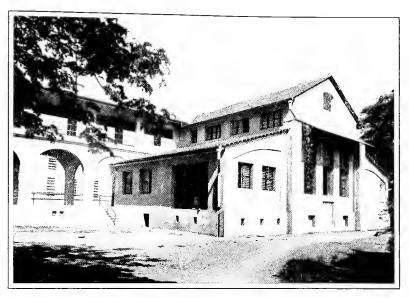
ONE OF THE STERILIZING ROOMS.  $\mathbf{PLATE}\ \mathbf{XXII}.$ 



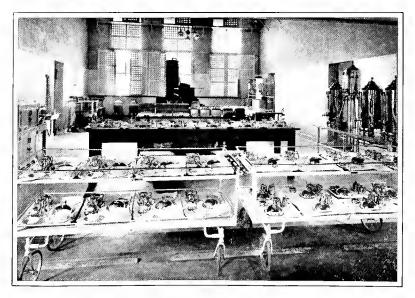
ONE OF THE OPERATING AMPHITHEATERS, SHOWING PORTION OF ZEISS ILLUMINATING APPARATUS.



NINETEEN BABIES LESS THAN TEN DAYS OLD. THREE PAIRS TWINS, PHILIPPINE GENERAL HOSPITAL, 1911,
PLATE XXIII.

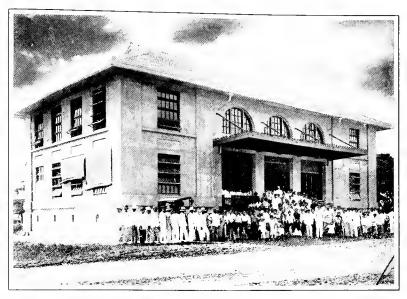


REAR VIEW OF KITCHEN.

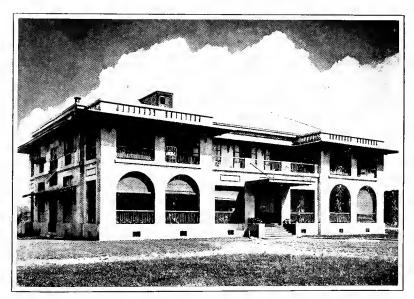


INTERIOR OF KITCHEN.

PLATE XXIV.



FREE DISPENSARY.
Showing patients awaiting treatment.

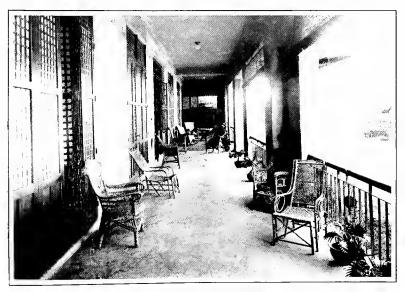


NURSES' HOME.

PLATE XXV.



ROOM IN THE NURSES' HOME.

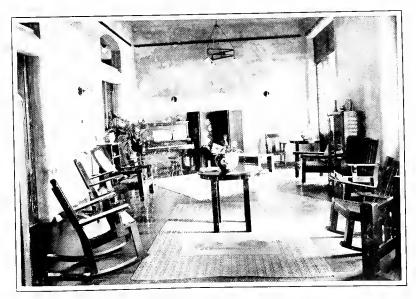


PIAZZA, NURSES' HOME.

PLATE XXVI.



PART OF DINING ROOM, NURSES' HOME.



RECEPTION ROOM, NURSES' HOME.

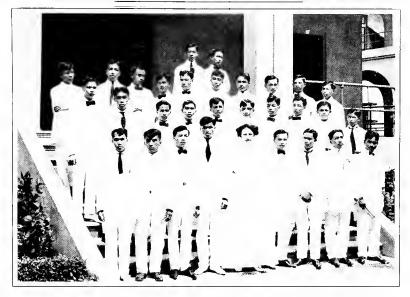
PLATE XXVII.



PRELIMINARY CLASS. ADMITTED OCTOBER 1, 1911.



CHIEF NURSE AND FEMALE PUPIL NURSES. FOUR GRADUATES, FRONT ROW,  $\mathbf{PLATE} \ \ \mathbf{XXVIII}.$ 



CHIEF NURSE AND MALE PUPIL NURSES.



FIRST GRADUATING CLASS.
PLATE XXIX.



